

Appendix B

Boring Logs and Supplemental Geotechnical Information

**Direct Push Technology (DPT)
Bore Logs From The
Energy Park/Longe/New York State Canal Corporation
Site**

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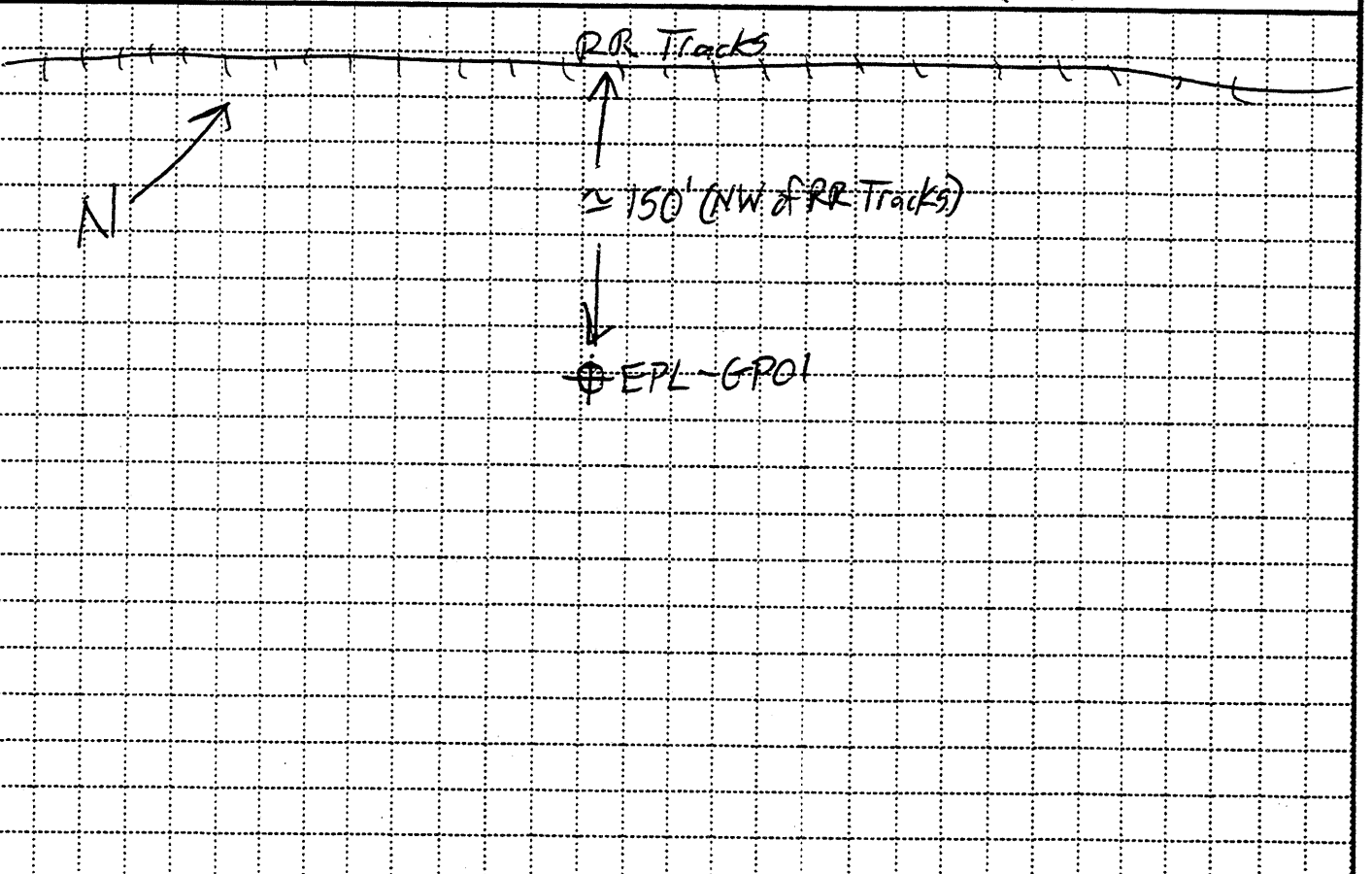
Borehole Record for EPL-GP01

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District Kansas City		Hole Number EPL-GP01	
1. Company Name Ecology & Environment Inc.		2. Drill Subcontractor North Star/Geologic		Sheet 1 of 2	
3. Project Hudson Facility Siting			4. Location Energy Park (Fort Edward)		
5. Name of Driller Joe Menzel			6. Manufacturer's Designation of Drill Geoprobe 5400		
7. Sizes and Types of Drilling and Sampling Equipment		8. Hole Location		9. Surface Elevation	
1.75 inch O.D. Macro-core Soil Sampling Rods w/ Acetate Sleeves, and the Discreet Soil Sampler		150' SE of RR Tracks, Lange Property			
12. Overburden Thickness > 25.4'		15. Depth Groundwater Encountered 9.1' BGS		11. Date Completed 9-29-03	
13. Depth Drilled Into Rock NA		16. Depth to Water and Elapsed Time After Drilling Completed 9.22' BGS after 15 minutes		10. Date Started 9-29-03	
14. Total Depth of Hole 25.4' BGS		17. Other Water Level Managements (Specify)			
18. Geological Samples NA		Disturbed		Undisturbed	
20. Samples For Chemical Analysis		VOC <input checked="" type="checkbox"/>		Metals <input checked="" type="checkbox"/>	
21. Disposition of Hole		Backfilled		Monitoring Well TEMPORARY	
19. Total Number of Core Boxes NA		Other (Specify) Post/PCBS <input checked="" type="checkbox"/>		Other (Specify) SVOCs <input checked="" type="checkbox"/>	
21. Total Core Recovery NA %		Other (Specify) CN <input checked="" type="checkbox"/>		23. Signature of Inspector Robert A. Meyer	

LOCATION SKETCH/COMMENTS

SCALE: **Variable**



PROJECT Hudson Facility Siting	HOLE NO. EPL-GP01
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Temporary SCREENED WELL

Lock Number Unnumbered Master Lock

Inner Casing Material NA

Inner Casing Inside Diameter _____ inches

GROUND SURFACE

Quantity of Material Used:

Bentonite _____
Pellets _____

Cement _____

Borehole 1.75 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size .010"

Screen Type slotted

PVC 1" dia.
 Stainless Steel _____

Pack Type/Size: No. 0

Sand _____
 Gravel _____
 Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

Stick-up 2.0' ft

Top of Grout NA ft

Sand from 2' to Surface

Top of Seal at 2 ft

Top of Sand Pack 5 ft

Top of Screen at 15.4 ft

Bottom of Screen at 25.4 ft

Bottom of Hole at 25.4' ft

Bottom of Sandpack at 25.4' BGS



NOTE: See pages 136 and 137 for well construction diagrams

Robert A. Meyer

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GPO1
Project Hudson Facility Siting			Inspector Robert A. Meyer			Sheet 3	Sheets of 8
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0'	0'-4' BGS	Oppm	NA		NA	Field Screening is FID unless otherwise noted.
	1'	SM Silty Sand (VF Sand to Fine)	in BZ & Soil Core				moist
	2'		Oppm				3.6' Rec. (of 4' Run)
	3'						
	4'						
	4'	4' to 8' BGS					
	5'	SM					
	6'	Silty Sand, Sand is VF to medium with trace coarse sand	Oppm in BZ & soil core				3.6' Rec moist
	7'						
	8'						

PROJECT Hudson Facility Siting	HOLE NO. EPL-GPO1
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HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP01
Project Hudson Facility Siting			Inspector Robert A. Myers		Sheet 5 of 8		
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8	8' to 9.6', SP as above					
	9						Water @ 9.1' BGS
	9.6'	9.6' to 12', SP			Sample EPL-GP01-5B		Saturated
	10	poorly graded, very fine to gray fine sand with some coarse sand/angular gravel.			collected @ 1455 from 10.2' to 12' BGS		3.7' Rec.
	11	Gray with trace clay	1 ppm off Soil Corp, @ 10.2' to 12' with FID = 0.4 ppm PID				
	12	12' to 16' SP as above					
	13	with trace coarse pebbles, gray to black					
	14		0 ppm off Soil Corp				3.9' Rec.
	15						
	16						

PROJECT Hudson Facility Siting

HOLE NO. EPL-GP01

Depth(feet).	NARRATIVE LITHOLOGIC DESCRIPTION	Moisture Content		
		Dry	Moist	Wet
	8' to 9.6' BGS, SM as above, Water @ 9.1' BGS	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
		<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	9.6' to 16' BGS, Poorly graded, Gray to black	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	V _{Fine} Sand with Fine Sand, some coarse sand	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	and angular gravel. Trace clay and coarse pebbles	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
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		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP01
Sheet **7** of **8**

Project **Hudson Facility Siting**

Inspector **Robert A. Meyer**

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16	16' to 20' GM Black to Gray	Oppm in BZ and off soil core	NA	NA	NA	3.8' rec.
	17	VF to med. Pebbles and sand					Saturated.
	18						
	19						
	20	20' to 20.6' GM as above	Oppm in BZ and off soil core				
	21	20.6' to 25' CH Gray Uniform Plastic CLAY					4.0' rec.
	22						02/LEL stable throughout drilling
	23						24' to 25' 1.0' REC.
	24	24' to 25' CH as above	Oppm all	1540	Complete Drilling		B.O.H @ 25' BGS
	25						

PROJECT **Hudson Facility Siting**

HOLE NO. **EPL-GP01**

Borehole Record for EPL-GP02

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District Kansas City		Hole Number EPL-GP02	
1. Company Name Ecology & Environment Inc.		2. Drill Subcontractor Northstar/Geologic		Sheet 1 of 8 Sheets	
3. Project Hudson Facility Siting			4. Location Energy Park (Fort Edward)		
5. Name of Driller - Joe Menzel			6. Manufacturer's Designation of Drill Geoprobe 5400		
7. Sizes and Types of Drilling and Sampling Equipment 1.75" O.D. Macro Core Soil Sampling Rods with Acetate sleeves, and the discreet soil sampler		8. Hole Location ≈ 250' SE of RR Tracks on Energy Park Property		9. Surface Elevation	
		10. Date Started 9-29-03		11. Date Completed 9-29-03	
12. Overburden Thickness > 25'		15. Depth Groundwater Encountered 9' BGS			
13. Depth Drilled Into Rock NA		16. Depth to Water and Elapsed Time After Drilling Completed 10.3' BGS after 5 hrs.			
14. Total Depth of Hole 25' BGS		17. Other Water Level Managements (Specify)			
18. Geological Samples NA		Disturbed —		Undisturbed —	
19. Total Number of Core Boxes NA		20. Samples For Chemical Analysis		21. Total Core Recovery NA %	
VOC <input checked="" type="checkbox"/>		Metals <input checked="" type="checkbox"/>		Other (Specify) Pest/PCBs	
Backfilled <input type="checkbox"/>		Monitoring Well <input checked="" type="checkbox"/>		Other (Specify) SVOCs	
		Temporary <input type="checkbox"/>		Other (Specify) CN	
21. Disposition of Hole			23. Signature of Inspector Robert A. Menzel		
LOCATION SKETCH/COMMENTS					
SCALE: Variable					
<p>The sketch shows a north-south oriented grid. On the left side, there are several parallel lines representing railroad tracks. To the right of the tracks, there is a shaded area labeled 'Woods'. A point is marked with a circle and labeled 'EPL-GP02'. Below this point, a note says '(≈ 250' SE of RR Tracks)'. A diagonal line labeled 'Dist. Rd.' runs from the bottom left towards the top right. A north arrow is drawn in the upper left corner.</p>					
PROJECT Hudson Facility Siting			HOLE NO. EPL-GP02		

Temporary SCREENED WELL

UN-numbered
 Lock Number MasterLock
 Inner Casing Material NA

OPEN-HOLE WELL

Stick-up _____ ft
 Inner Casing Material _____
 Inner Casing Inside Diameter _____ inches

Stick-up 2.4 ft

Top of Grout NA ft

Sand from 2' to surface

Top of Seal at 2 ft

Top of Sand Pack 4 ft

Top of Screen at 15 ft

Bottom of Screen at 25 ft

Bottom of Hole at 25 ft

Bottom of Sandpack at 25'



Inner Casing Inside Diameter _____ inches

GROUND SURFACE

Quantity of Material Used:
 Bentonite Pellets _____

Cement _____

Borehole Diameter 1.75 inches

Cement/Bentonite _____

Grout _____

Screen Slot Size .010"

Screen Type slotted

PVC 1" dia.

Stainless Steel _____

Pack Type/Size:

Sand No. 0

Gravel _____

Natural _____



Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

[Handwritten signature]

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GPOZ
Project Hudson Facility Siting				Inspector Robert A. Meyer			Sheet 3 of 8
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 4' SM	Results for FID unless Noted.	NA		NA	BZ = Breathing Zone. PID BG 15 0.16 ppm FID BG 15 0.6 ppm 3.7' Rec
	1		Oppm of sample & BZ				
	2						
	3						
	4	4' to 8' SM-SP					
	5						
	6						3.8' Rec.
	7						Moist to Wet @ 7.1' BGS
	8						
PROJECT Hudson Facility Siting				HOLE NO. EPL-GPOZ			

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP02

Project
Hudson Facility Siting

Inspector
Robert M. Myers

Sheet 5 of 8

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8	3' to 10.9' SM-SP as above	Oppm 8'-9'	NA		NA	
	9		5.1 ppm FID and .45 ppm PID From 9' to 10.9' off soil core, Oppm in BZ		1005 Collect Sample EPL-GP02-SB From 9' to 10.9' BGS		Water @ 9' BGS.
	10						3.5' rec
	11	10.9' to 12' SW	Oppm From 10.9' to 12' BGS off soil core				
	12	12' to 16' SW					
	13						
	14		Oppm in BZ & off soil core				3.6' rec
	15						
	16						

PROJECT Hudson Facility Siting

HOLE NO. EPL-GP02

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP02

Project
Hudson Facility Siting

Inspector
Robert A. Myerson

Sheet **7** of **8**

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16	16' to 20' SW		NA	NA	NA	
	17						
	18		Oppm in B2 and off soil core				3.3' Rec
	19						
	20	20' to 24' SW					
	21		Oppm in B2 and off soil core				3.7' Rec
	22						
	23						Orbit stable throughout drilling
	24	24' to 25' SW					
	25		Oppm in B2 & soil core				0.9' Rec.

PROJECT **Hudson Facility Siting**

HOLE NO. **EPL-GP02**

Borehole Record for EPL-GP03

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District Kansas City		Hole Number EPL-GP03	
1. Company Name Ecology & Environmentals		2. Drill Subcontractor Northstar/Geologic		Sheet 1 of 8 Sheets	
3. Project Hudson Facility Siting			4. Location Energy Park (Fort Edward)		
5. Name of Driller Joe Menzoni			6. Manufacturer's Designation of Drill Geoprobe 5400		
7. Sizes and Types of Drilling and Sampling Equipment 1.75" OD, Macro-Core Soil Sampling Rais w/ Acetate sleeves, and the dissect soil sampler.		8. Hole Location South end of site, Large Property		9. Surface Elevation	
12. Overburden Thickness > 25.1'		15. Depth Groundwater Encountered 9.6' BGS		11. Date Completed 9-29-03	
13. Depth Drilled into Rock NA		16. Depth to Water and Elapsed Time After Drilling Completed 11.12' BGS after 20 minutes		10. Date Started 9-29-03	
14. Total Depth of Hole 25.1' BGS		17. Other Water Level Managements (Specify)			
18. Geological Samples NA		Disturbed —		Undisturbed —	
19. Total Number of Core Boxes NA		20. Samples For Chemical Analysis		21. Total Core Recovery NA %	
VOC <input checked="" type="checkbox"/>		Metals <input checked="" type="checkbox"/>		Other (Specify) SVOCs	
21. Disposition of Hole		Backfilled <input type="checkbox"/>		Monitoring Well <input type="checkbox"/>	
Other (Specify)		Other (Specify) Pest/PCBs		Other (Specify) CN	
23. Signature of Inspector					

LOCATION SKETCH/COMMENTS SCALE: **Variable**

PROJECT Hudson Facility Siting	HOLE NO. EPL-GP03
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Lock Number Un-numbered Master Lock

SCREENED WELL

Stick-up 2.41 ft

Top of Grout NA ft

Sand from 0.6' to surface

Top of Seal at 0.6 ft

Top of Sand Pack 4 ft

Top of Screen at 15.1 ft

Bottom of Screen at 25.1 ft

Bottom of Hole at 25.1 ft

Bottom of Sandpack at 25.1' 865

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole 1.75 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size .010"

Screen Type slotted

PVC 1" dia

Stainless Steel _____

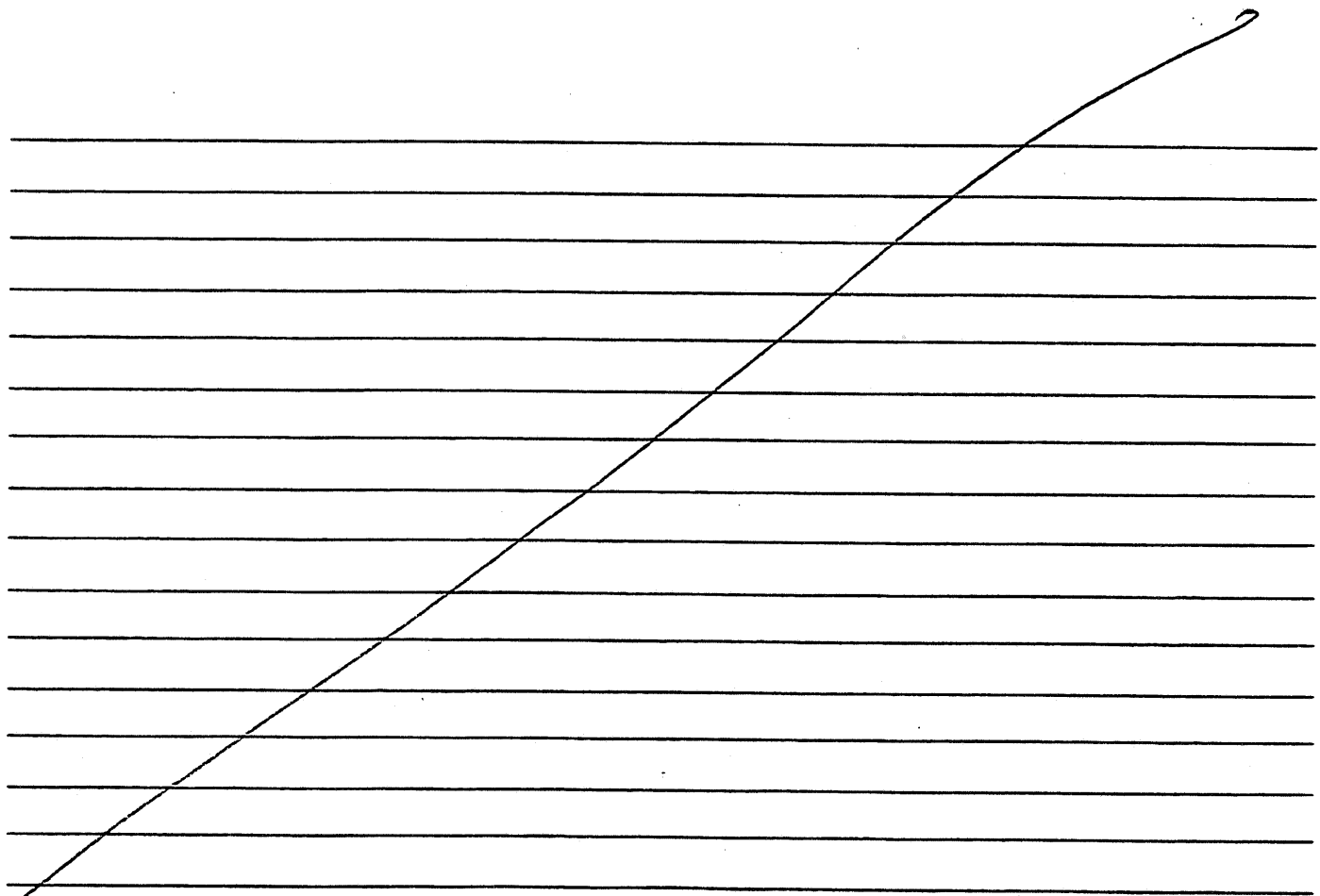
Pack Type/Size:

Sand No. 0

Gravel _____

Natural _____

NOTE: See pages 136 and 137 for well construction diagrams



HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP03
Project Hudson Superfund Fac. siting			Inspector Robert A. Meyer			Sheet 3 of 8	
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 0.65' SM		NA		NA	Field Screening Results are for FID unless noted
	1	0.65' to 4' SW	Oppm in BZ and off Soil Core				
	2						3.7' Rec.
	3						
	4	4' to 8' SW	Oppm in BZ and off Soil Core				
	5						
	6						3.8' Rec.
	7						
	8						
PROJECT Hudson Facility Siting					HOLE NO. EPL-GP03		

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP03

Project **Hudson Facility Siting**

Inspector **R. Deat W. Myers**

Sheet **5** of **5** Sheets

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8	8' to 9.6' SW		NA		NA	
	9						
	10	9.6' to 12' SW					3.6' Rec Water @ 9.6' BGS
	11			PID = 8ppm FID = 0ppm 0.17ppm	1430 Collect EPL-GP03-SB 9.6' to 11.0'		
	12	12' to 16' SW					
	13						
	14			0ppm in BZ & off soil Core.			
	15						3.8' Rec.
	16						

PROJECT **Hudson Facility Siting**

HOLE NO. **EPL-GP03**

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP03

Project **Hudson Facility Siting**

Inspector **Robert A. Meyer**

Sheet **7** of **8** Sheets

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16	16' to 20' SW		NA		NA	
	17		0 ppm in BZ and off soil core				
	18		↓				3.4' Rec
	19						
	20	20' to 21.8' SW					
	21		0 ppm in BZ and off soil core				
	22	21.8 to 23.4' SW	↓				3.5' Rec
	23						Oz/LEL stable throughout drilling
	24	23.4' to 25' GP	↓				
	25						0.9' Rec

PROJECT **Hudson Facility Siting**

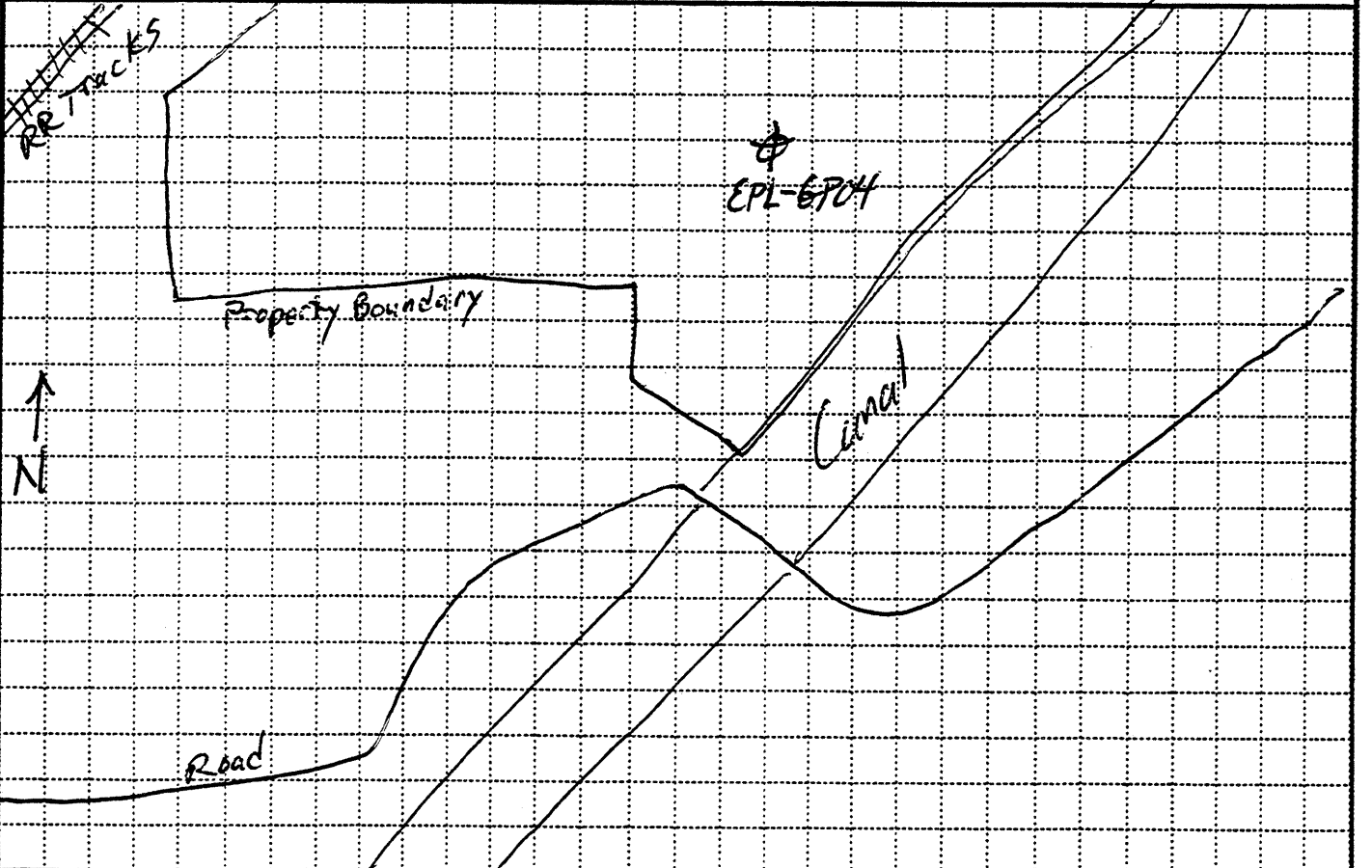
HOLE NO. **EPL-GP03**

Borehole Record for EPL-GP04

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District <i>Kansas City</i>	Hole Number <i>EPL-GP04</i>
1. Company Name <i>Ecology & Environment Inc.</i>		2. Drill Subcontractor <i>Northstar/Geologic Inc.</i>	Sheet <i>1</i> of Sheets
3. Project <i>Hudson Superfund Facility Siting</i>		4. Location <i>Energy Park (Fort Edward)</i>	
5. Name of Driller <i>Joe Menzal</i>		6. Manufacturer's Designation of Drill <i>Geoprobe 5400</i>	
7. Sizes and Types of Drilling and Sampling Equipment <i>1.75" O.D. macro core Soil Sampling Rods with acetate sleeves, and the discrete soil sampler</i>		8. Hole Location <i>South end of Energy Park property ≈ 400' NW of Canal.</i>	
		9. Surface Elevation	
		10. Date Started <i>10-1-03</i>	11. Date Completed <i>10-1-03</i>
12. Overburden Thickness <i>> 25'</i>		15. Depth Groundwater Encountered <i>4.4' BGS</i>	
13. Depth Drilled Into Rock <i>NA</i>		16. Depth to Water and Elapsed Time After Drilling Completed <i>3.96' BGS after 20 minutes</i>	
14. Total Depth of Hole <i>25'</i>		17. Other Water Level Managements (Specify)	
18. Geological Samples <i>NA</i>		Disturbed <i>-</i>	Undisturbed <i>-</i>
19. Total Number of Core Boxes <i>NA</i>			
20. Samples For Chemical Analysis		VOC <input checked="" type="checkbox"/>	Metals <input checked="" type="checkbox"/>
		Other (Specify) <i>SVOCs</i>	Other (Specify) <i>Pest/PCBs</i>
		Other (Specify) <i>CN</i>	21. Total Core Recovery <i>NA %</i>
21. Disposition of Hole <i>Backfilled</i>		<i>Monitoring Well</i>	23. Signature of Inspector <i>Ralph C. Meyer</i>

LOCATION SKETCH/COMMENTS SCALE: *NTS*



PROJECT <i>Hudson Superfund Facility Siting</i>	HOLE NO. <i>EPL-GP04</i>
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*un-numbered
Master Lock*

Lock Number

SCREENED WELL

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material NA

Inner Casing Material _____

Inner Casing Inside Diameter NA inches

Inner Casing Inside Diameter _____ inches

Stick-up 2.3 ft

Top of Grout _____ ft

Sand from 2' to surface

Top of Seal at 2 ft

Top of Sand Pack 4 ft

Top of Screen at 15 ft

Bottom of Screen at 25 ft

Bottom of Hole at 25 ft

Bottom of Sandpack at 25

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole 1.75 inches Diameter

Cement/Bentonite _____

Grout _____

Screen Slot Size .010"

Screen Type slotted

PVC 1" dia.

Stainless Steel _____

Pack Type/Size:

Sand No. 0

Gravel _____

Natural _____

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

Robert W. Myler

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP04
Project Hudson Facility Siting			Inspector <i>Rod A. Myers</i>				Sheet 3 of
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 0.45' SM		NA		NA	Screening Results for FID unless noted
	1	0.45' to 4.0' SW	0ppm in BZ & off core				3.4' Rec.
	2						
	3						
	4	4' to 3' SW			Collect Sample EPL-GP04-SB @ 0822 from 4' to 6' BGS		Water @ 4.4' BGS
	5						
	6		0ppm in BZ & off core				4.0' Rec.
	7						
	8						

PROJECT Hudson Facility Siting

HOLE NO. EPL-GP04

HTRW DRILLING LOG (Continuation Sheet) Hole Number
EPL-GP04

Project **Hudson Facility Siting** Inspector *Robert A. Mays* Sheet **5** of **9** Sheets

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	3	8' to 10.3'		NA		NA	
		SW	Opp in BZ & off soil core				4.0' rec
	9						
		10.3' to 12'					
		GM					
	10						
	11						
	12	12' to 16'					
		GM					
	13						
	14		Opp in BZ & off soil core				2.6' rec
	15						
	16						

PROJECT **Hudson Facility Siting** HOLE NO. **EPL-GP04**

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP04
Project Hudson Facility Siting			Inspector Robert A. Meyer			Sheet 7 of 8	
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16	16' to 18.6' GM	↑				
	17		0 ppm in BZ + of soil core				3.6' Rec
	18						
	19	18.6' to 19.75' SW					
	20	19.75' to 20' GM					
	21	20' to 24' GM					
	22						2.9' Rec
	23						O ₂ /LEL Readings stable throughout drilling
	24	24' to 25' GM	↓				0.35' Rec
	25						

PROJECT Hudson Facility Siting HOLE NO. EPL-GP04

Borehole Record for EPL-G-P05~~4~~

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District <u>Kansas City</u>		Hole Number <u>EPL-GP05</u>	
1. Company Name <u>Ecology & Environment</u>		2. Drill Subcontractor <u>Northstar/Geologic</u>		Sheet <u>1</u> of <u>8</u> Sheets	
3. Project <u>Hudson Superfund Facility Siting</u>			4. Location <u>Energy Park (Fort Edward)</u>		
5. Name of Driller <u>Joe Menza</u>		6. Manufacturer's Designation of Drill <u>Geoprobe 5400</u>			
7. Sizes and Types of Drilling and Sampling Equipment <u>1.75 inch O.D. macro core soil sampling rods w/acetate sleeves, and the discrete soil sampler</u>		8. Hole Location <u>East side of site, Energy Park Property</u>		9. Surface Elevation	
12. Overburden Thickness <u>7'25"</u>		10. Date Started <u>10-1-03</u>		11. Date Completed <u>10-1-03</u>	
13. Depth Drilled Into Rock <u>NA</u>		15. Depth Groundwater Encountered <u>3.6' BGS</u>		16. Depth to Water and Elapsed Time After Drilling Completed <u>5.02 BGS after 15 minutes</u>	
14. Total Depth of Hole <u>25' BGS</u>		17. Other Water Level Managements (Specify)			
18. Geological Samples <u>NA</u>		Disturbed		Undisturbed	
20. Samples For Chemical Analysis		VOC <input checked="" type="checkbox"/>		Metals <input checked="" type="checkbox"/>	
21. Disposition of Hole		Backfilled		Monitoring Well <u>Temporary</u>	
19. Total Number of Core Boxes <u>NA</u>		Other (Specify) <u>SVOC's</u>		Other (Specify) <u>Red/P/B</u>	
21. Total Core Recovery <u>NA</u> %		Other (Specify) <u>CN</u>		23. Signature of Inspector <u>Robert A. Meyer</u>	
LOCATION SKETCH/COMMENTS			SCALE: <u>NTS</u>		
PROJECT <u>Hudson Superfund Facility Siting</u>				HOLE NO. <u>EPL-GP04</u>	

HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project			Inspector			EPL-GP05	
Hudson Facility Siting			Robert A. Meyer			Sheet	Sheets
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 4' GM (Fill)	FID unless Noted	NA		NA	
	1						
	2		Oppm in BZ and off Soil Core				2.6' Rec.
	3						
	4	4' to 5.2' GM (Fill)					Water @ 3.6'
	5						
	5.2'	5.2' to 8' SW					
	6		5 ppm FID off soil & 0.2 ppm PID 0 ppm in BZ				
	7						
	8						
					Collect Sample EPL-GP05-SB and Dup 5 ppm FID 0.2 ppm PID From 5' to 8' BZ @ 10:00		3.7' Rec.

PROJECT Hudson Facility Siting

HOLE NO. EPL-GP05

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP05
Project Hudson Facility Siting			Inspector Robert A. Myer			Sheet 5 of 8	Sheets
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8'	8' to 12.00' SW 8.65' to	FID unless NOTED	NA	NA	NA	
	9'						
	10'		Oppm in BZ & off Soil Cores				4.0' Rec
	11'						
	12'	12' to 12.65' SW					
	13'	12.65' to 16' GA SW					
	14'						3.6'
	15'						
	16'						

PROJECT Hudson Facility Siting HOLE NO. EPL-GP05

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-6P05
Project Hudson Facility Siting			Inspector Robert A. Meyer			Sheet 7 of 8	Sheets
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16	16' to 20' SW	↑ Oppm in BZ and off soil	NA	NA	NA	
	17						3.8' Rec
	18						
	19						
	20	20' to 24' SW					
	21						0.2 LEL Readings stable throughout Drilling
	22						3.6' Rec
	23						
	24	24' to 25' SW					
	25						0.3' Rec

PROJECT Hudson Facility Siting

HOLE NO. EPL-6P05

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP05

Project
Hudson Facility Siting

Inspector
R. Deitler

Sheet **7** of **8**

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16			NA		NA	
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						

PROJECT **Hudson Facility Siting**

HOLE NO. **EPL-GP05**

Borehole Record for EPL-GP06

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District <u>Kansas City</u>		Hole Number <u>EPL-GP06</u>	
1. Company Name <u>Ecology & Environment Inc.</u>		2. Drill Subcontractor <u>Northstar/Geologic Inc.</u>		Sheet <u>1</u> of <u>8</u> Sheets	
3. Project <u>Hudson Superfund Facility Siting</u>			4. Location <u>Energy Park (Fort Edward)</u>		
5. Name of Driller <u>Joe Menzal</u>			6. Manufacturer's Designation of Drill <u>Geoprobe 5400</u>		
7. Sizes and Types of Drilling and Sampling Equipment		8. Hole Location		9. Surface Elevation	
<u>1.75" O.D. Macro core soil sampling Rods with discreet sampler and acetate sleeves.</u>		<u>South Central Energy Park Property</u>			
12. Overburden Thickness			15. Depth Groundwater Encountered		
13. Depth Drilled into Rock <u>NA</u>			16. Depth to Water and Elapsed Time After Drilling Completed		
14. Total Depth of Hole			17. Other Water Level Managements (Specify)		
18. Geological Samples <u>NA</u>		Disturbed <u>—</u>		Undisturbed <u>—</u>	
19. Total Number of Core Boxes <u>NA</u>		20. Samples For Chemical Analysis		21. Total Core Recovery <u>NA</u> %	
VOC <input checked="" type="checkbox"/>		Metals <input checked="" type="checkbox"/>		Other (Specify) <u>SVOC</u>	
Other (Specify) <u>POST/PLBS</u>		Other (Specify) <u>CN</u>			
21. Disposition of Hole <u>Backfilled</u>			23. Signature of Inspector <u>[Signature]</u>		
21. Disposition of Hole <u>Monitoring Well</u>			23. Signature of Inspector		
21. Disposition of Hole <u>Other (Specify)</u>			23. Signature of Inspector		
LOCATION SKETCH/COMMENTS			SCALE: <u>NTS</u>		
PROJECT <u>Hudson Superfund Facility Siting</u>			HOLE NO. <u>EPL-GP06</u>		

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP06
Project Hudson Facility Siting			Inspector <i>Robert A. [Signature]</i>			Sheet 3 of 3	Sheets
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 4'	FID unless Noted	NA		NA	
	1	SM/GM					
	2		Oppm in BZ & off soil				
	3						2.6' REC
	4	4'-8'					
	5	SM/GM					
	6						4.0' REC
	7						
	8						Water @ 7.6' BGS

PROJECT Hudson Facility Siting

HOLE NO. EPL-GP06

HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project <i>Hudson Facility Siting</i>			Inspector <i>Robert M. [Signature]</i>			EPL-GP06	
						Sheet	Sheets
						5	of 8
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8	8' to 9.4' SM/GM	Oppm 8-9.4'	NA	12:04 Collect Soil Sample EPL-GP065B From 8' to 10' RAN 9.4' to 11' BLS	NA	4.0' Rec
	9	9.4' - 12' SW	9.4' to 11' FID = 35ppm PID = 6ppm				
	11		Oppm 11-12'				
	12	12' to 12.7' SW	Oppm FID in BZ & off soil core				
	13	12.7' to 16' SP					
	14						3.3' Rec
	15						
	16						

PROJECT *Hudson Facility Siting*

HOLE NO. *EPL-GP06*

HTRW DRILLING LOG (Continuation Sheet) Hole Number
EPL-GP06

Project **Hudson Facility Siting** Inspector **Robert A. Meyer** Sheet **7** of **8** Sheets

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
16	16' to 20'	SP	↑	NA		NA	
17			Oppm in BZ and off Soil Corr				3.7' Rec.
18			↓				
19							
20	20' to 24'	SP	↓				
21							3.3' Rec.
22							0.2/EL stable throughout drilling
23							
24	24' to 25'	SP	↓				
25							0.75' Rec.

PROJECT **Hudson Facility Siting** HOLE NO. **EPL-GP06**

Borehole Record for EPL-GP07

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District		Hole Number	
1. Company Name <i>Ecology & Environment Inc.</i>		2. Drill Subcontractor <i>Northstar / Geologic Inc.</i>		Hole Number <i>EPL-GP07</i>	
3. Project <i>Hudson Facility Siting</i>		4. Location <i>Energy Park (Ford Edward)</i>		Sheet <i>1</i>	Sheets <i>of 3</i>
5. Name of Driller <i>Joe Menzala</i>		6. Manufacturer's Designation of Drill <i>Geoprobe 5400</i>			
7. Sizes and Types of Drilling and Sampling Equipment <i>1.75" OD Macro core soil sampler with disc core sampler and acetate sleeves</i>		8. Hole Location <i>North central Energy Park Property</i>		9. Surface Elevation	
12. Overburden Thickness <i>> 25'</i>		10. Date Started <i>10-1-03</i>		11. Date Completed <i>10-1-03</i>	
13. Depth Drilled into Rock <i>NA</i>		15. Depth Groundwater Encountered <i>4.4' BGS</i>		16. Depth to Water and Elapsed Time After Drilling Completed	
14. Total Depth of Hole <i>25'</i>		17. Other Water Level Managements (Specify)			
18. Geological Samples <i>NA</i>		Disturbed <input checked="" type="checkbox"/>		Undisturbed <input type="checkbox"/>	
19. Total Number of Core Boxes		20. Samples For Chemical Analysis		21. Total Core Recovery <i>NA</i> %	
20. Samples For Chemical Analysis		VOC <input checked="" type="checkbox"/>	Metals <input checked="" type="checkbox"/>	Other (Specify) <i>SVOCs</i>	Other (Specify) <i>PEST/PCBs</i>
21. Disposition of Hole		<i>Backfilled</i>	Monitoring Well	Other (Specify)	23. Signature of Inspector <i>Robert J. Meyer</i>
LOCATION SKETCH/COMMENTS			SCALE:		
<p><i>See EPL-GP06 Log</i></p>					
PROJECT <i>Hudson Superfund Facility Siting</i>				HOLE NO. <i>EPL-GP07</i>	

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GPOT
Project Hudson Facility Siting		Inspector Robert A. Meyer			Sheet 3 of 8		Sheets 8
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	0	0' to 3.7'	FID unless Noted	NA		NA	
	1	SM/GP	↑				
	2		Oppm in BZ and off soil core				Wet From 1.2' to 3.7'
	3						3.7' Rec
	4	3.7' to 3.9'					
	5	3.9' to 6.9'					Water @ 4.4' BGS
	6	SM/GP					
	7						
	8	6.9' to 8.0'					3.6' Rec
	9	SW					
			FID ≈ 5ppm PID ≈ 5ppm Oppm in BZ	soil core	Collect sample from 7' to 9' BGS EPL-GPOT-SB FID ≈ 5ppm PID = 5ppm @ 1435		

PROJECT Hudson Facility Siting

HOLE NO. EPL-GPOT

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GP07
Project Hudson Facility Siting			Inspector Robert A. Meyer			Sheet 5	Sheets of 8
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	8	8' to 12' SW	FID Readings Unless noted Opp in BZ & off soil	NA	Sampled see pg 308	NA	
	9		↓				4.0' Rec
	10						
	11						
	12	12' to 16' SW					
	13						
	14						3.8' Rec.
	15						
	16						
PROJECT Hudson Facility Siting				HOLE NO. EPL-GP07			

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GP07
Sheet **7** of **8** Sheets

Project **Hudson Fac. Siting**

Inspector *[Signature]*

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
16	16'-20'	SW	FID = 0 ppm in BZQ Soil Core	NA		NA	
17							3.6' Rec
18							
19							
20	20'-24'	SW					
21							3.8' Rec
22							OK/EL Stable during drilling
23							
24	24'-25'	SW					
25							0.3' Rec

PROJECT **Hudson Facility Siting**

HOLE NO. **EPL-GP07**

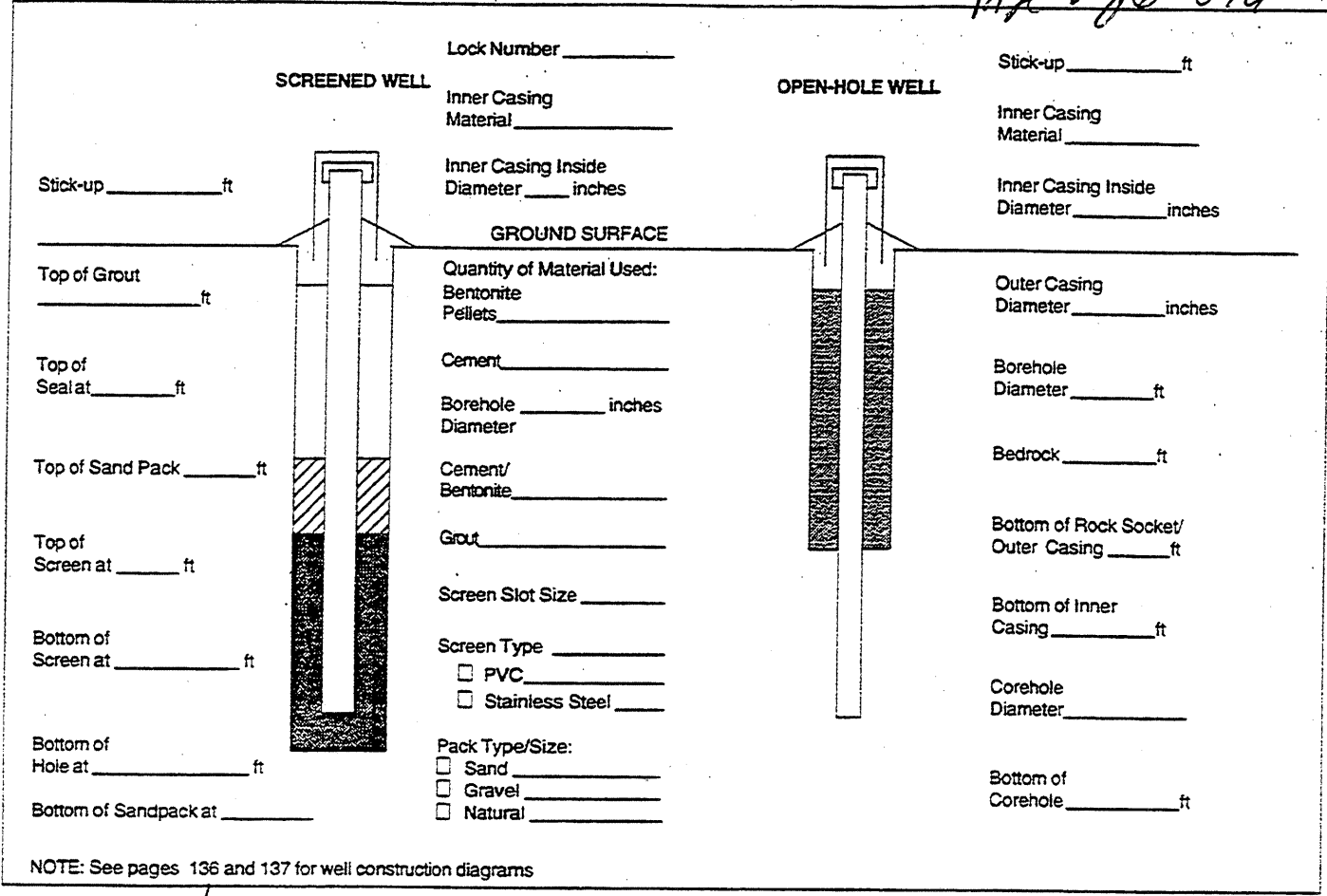
**Geotechnical Bore Logs
From the
Energy Park/Longe/New York State Canal Corporation
Site**

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Borehole Record for EPL-6T01

- ✓ • HTRW Drilling Log
- ✓ • Narrative Lithologic Description and Well Construction Diagram
- ✗ • Well Development Record
- ✗ • Well Development -- Parameter Measurements
- ✗ • Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District <u>KANSAS CITY</u>		Hole Number <u>G701</u>	
1. Company Name <u>EAC</u>		2. Drill Subcontractor <u>GEOLOGIC, INC.</u>		Sheet <u>1</u> of <u>46</u> Sheets	
3. Project <u>ENERGY PARK RANGE</u>			4. Location <u>FORT EDWARD, WY</u>		
5. Name of Driller <u>JEFF TREW</u>			6. Manufacturer's Designation of Drill <u>CME 45-C</u>		
7. Sizes and Types of Drilling and Sampling Equipment <u>4 1/4" HSA</u> <u>2" SPIRIT SPOON</u> <u>(24" SPIRIT SPOON @ 24')</u>		8. Hole Location <u>G701</u>		9. Surface Elevation	
12. Overburden Thickness <u>NOT DETERMINED; MIN 26'</u>		10. Date Started <u>9/29/03</u>		11. Date Completed <u>9/30/03</u>	
13. Depth Drilled into Rock <u>ROCK NOT REACHED</u>		15. Depth Groundwater Encountered <u>4' BGS</u>		16. Depth to Water and Elapsed Time After Drilling Completed <u>5.08' BGS AFTER 14 HRS.</u>	
14. Total Depth of Hole <u>HSA @ 24'; @ SPIRIT SPOON @ 26'</u>		17. Other Water Level Managements (Specify) <u>4.8" THROUGH 24' AUGER, @ 24' END 9/29/03</u>		19. Total Number of Core Boxes <u>0</u>	
18. Geological Samples		Disturbed <u>0</u>		Undisturbed <u>13</u>	
20. Samples For Chemical Analysis		VOC <u>N/A</u>		Metals <u>0</u>	
		Other (Specify) <u>MOISTURE</u>		Other (Specify) <u>GRAIN SIZE</u>	
21. Disposition of Hole		Backfilled <input checked="" type="checkbox"/>		Monitoring Well <input type="checkbox"/>	
		<u>REMOVED</u>		<u>N/A</u>	
23. Signature of Inspector		<u>Jim Kelleher</u>			
LOCATION SKETCH/COMMENTS		<u>COUPLINGS</u>			
		<u>SCALE: NOT TO SCALE</u>			
PROJECT <u>HUDSON RIVER FACILITY GRIND</u>				HOLE NO. <u>EPL-G701</u>	



NOTE: See pages 136 and 137 for well construction diagrams

NO Well Constructed; GEOTECH Boring ONLY

16:31 started drilling ^{EPL} G-10-1
 18:34 pulled up; HEADING off site

NOTE: This Borehole was selected for moisture profiling. A sample of soil from EXACT 2 FOOT SPURT SPOONED INTERVAL was selected for analysis. The selected portion was the NATURAL SOIL ONLY; NO SLOUGH-IN. IN ADDITION to the moisture profile samples, the soil sample for the 4'-6" interval was also selected for ATTERBURG LIMIT AND MOISTURE CONTENT ANALYSIS. Time: 16:45

Moisture Content Profiling Results of Sample Numbered as NUMBER-ALPHA, with A later being assigned for EXACT 2-Foot INTERVAL, starting with "A" for "0-2-Foot", and "B" for the 2-4-foot intervals.

⇒ Air Breathing Zone via-1000 readings were less than 1ppm

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
670

Project
ENERGY PARK / Longe

Inspector
Tom NICKERSON

Sheet 3 of 6
Sheets

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (ppm) (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	1	SW	0 ppm 7/1/2/1/0		EPL-GT01-A	4/1/4/3	50% Recovery
	2						
	3	SW	0 ppm 7/1/2/1/0		EPL-GT01-B	2/3/5/4	60% Recovery
	4						
	5	SW	0 ppm 7/1/2/1/0		EPL-GT01-C	3/3/3/4	75% Rec.
	6						
	7	SP	0 ppm 7/1/2/1/0		EPL-GT01-D	4/3/4/3	60% Recovery
	8						
	9	SP → SM	0 ppm 7/1/2/1/0		EPL-GT01-E	2/2/2/3	75% Rec.
	10						
	11	SP SM	0 ppm 7/1/2/1/0		EPL-GT01-F	1/2/3/4	75% Recovery
	12						
	13	SP SM	0 ppm 7/1/2/1/0		EPL-GT01-G	3/4/4/3	80% Rec.
	14						
	15	SM	0 ppm 7/1/2/1/0		EPL-GT01-H	2/3/4/3	90% Rec.
	16						

PROJECT
ANDESAN RIVER RD. FACILITY SITING PROJECT

HOLE NO.
EPL-GT01

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-GT01
Sheet **5** of **6** Sheets

Project **ENERGY MARK/604P
HUDSON RIVER PCB FACILITY
SITING**

Inspector **Jon Nickerson**

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	16						
	17	SM	0 ppm 7 BKAM		EPL-GT01-F	3/3/4 12/4	75% Rec
	18						
	19	SM	0.0 PPM BKAM		EPL-GT01-J	3/4/5/5	75%
	20						
	21	SM	0 ppm		EPL-GT01-K	4/4/4/4	50% Rec
	22	SC					
	23	SM	0 ppm		EPL-GT01-L	3/4/5/8	50% Rec
	24						
	25	SM	0.3 ppm			4/4/5/5	75%
	26		B.O.H. Angled to 24' Split spoon sampled to 26'				Rec

PROJECT **HUDSON RIVER PCB FACILITY SITING**

HOLE NO. **EPL-GT01**

Borehole Record for EPL-6702

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG			District	Hole Number
1. Company Name <i>ECOLOGY + ENVIRONMENTAL, INC.</i>		2. Drill Subcontractor <i>KANSAS CITY GEOLOGIC, INC.</i>		<i>EPL-6702</i>
3. Project <i>ENERGY FARM / LONGO SITE ASSESSMENT</i>		4. Location <i>FORT EDWARD, NY</i>		
5. Name of Driller <i>JOFF NEW</i>		6. Manufacturer's Designation of Drill <i>CME-45C</i>		
7. Sizes and Types of Drilling and Sampling Equipment <i>4 1/2" HSA w/SPUR 2" x 24"</i>		8. Hole Location <i>NEAR RAILROAD R.O.W. WEST SIDE OF LOW FILL</i>		
		9. Surface Elevation		
		10. Date Started <i>9/30/03</i>		11. Date Completed <i>9/30/03</i>
12. Overburden Thickness <i>> 25'</i>		15. Depth Groundwater Encountered <i>7.8'</i>		
13. Depth Drilled Into Rock <i>N/A</i>		16. Depth to Water and Elapsed Time After Drilling Completed <i>NOT RECORDED</i>		
14. Total Depth of Hole <i>24' HSA, 26' SPUR</i>		17. Other Water Level Managements (Specify) <i>NOT RECORDED</i>		
18. Geological Samples		Disturbed <i>0</i>		Undisturbed <i>1</i>
19. Total Number of Core Boxes <i>0</i>		20. Samples For Chemical Analysis		21. Total Core Recovery <i>N/A %</i>
VOC <i>0</i>		Metals <i>0</i>		Other (Specify) <i>MOISTURE</i>
21. Disposition of Hole		Backfilled <i>0</i>		Monitoring Well <i>0</i>
		Other (Specify)		23. Signature of Inspector <i>[Signature]</i>
LOCATION SKETCH/COMMENTS				
SCALE: <i>NOT TO SCALE</i>				
PROJECT <i>Hudson River PCB Facility Siting project.</i>			HOLE NO. <i>EPL-6702</i>	

	Lock Number _____	
SCREENED WELL	Inner Casing Material _____	OPEN-HOLE WELL
Stick-up _____ ft	Inner Casing Inside Diameter _____ inches	Stick-up _____ ft
Top of Grout _____ ft	GROUND SURFACE	Inner Casing Material _____
Top of Seal at _____ ft	Quantity of Material Used:	Inner Casing Inside Diameter _____ inches
Top of Sand Pack _____ ft	Bentonite Pellets _____	Outer Casing Diameter _____ inches
Top of Screen at _____ ft	Cement _____	Borehole Diameter _____ ft
Bottom of Screen at _____ ft	Borehole Diameter _____ inches	Bedrock _____ ft
Bottom of Hole at _____ ft	Cement/Bentonite _____	Bottom of Rock Socket/Outer Casing _____ ft
Bottom of Sandpack at _____	Grout _____	Bottom of Inner Casing _____ ft
	Screen Slot Size _____	Corehole Diameter _____
	Screen Type _____	Bottom of Corehole _____ ft
	<input type="checkbox"/> PVC _____	
	<input type="checkbox"/> Stainless Steel _____	
	Pack Type/Size:	
	<input type="checkbox"/> Sand _____	
	<input type="checkbox"/> Gravel _____	
	<input type="checkbox"/> Natural _____	

NOTE: See pages 136 and 137 for well construction diagrams

GEOTECH BORING ONLY; NO WELL CONSTRUCTION

- Collected one soil sample for particle size, Atterberg, and moisture content analysed. Collected @ 12:31
- Equipment calibrated using appropriate calibration gases
EPL-6702-
- All Breathing zone readings on TVA-1000 were < 1ppm

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
ETL-GT02
Sheet **3** of **6** Sheets

Project **Energy Park/Large Hudson River** Inspector **Jon Wickerson**

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D) (PPM)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	1	OL ML	0.7 FID: 131 PPM PID: 0 PPM			4/5/6/7	40% Rec
	2						
	3	SW	0 FID 0.2 PID			6/6/5/5	90%
	4						
	5	SW	FID: 0 PID 0.5 PPM			3/4/3/4	90%
	6						
	7	SW				2/4/2/2	75%
	8	Sm	0.5 PID 0 FID				
	9		0.5 PID 0 FID		ETL-GT02 8/11/1	3/4/5/5	100%
	10						
	11	SW	0.2 PID 0 FID			3/4/5/5	90%
	12						
	13	SW	0.1 PID 0 PPM FID			2/3/3/4	90%
	14						
	15		2.0 PID 0.1 FID 0 PPM			2/2/3/3	90% Rec
	16						

PROJECT **Hudson River PCB Facility Siting** HOLE NO. **ETL-GT02**

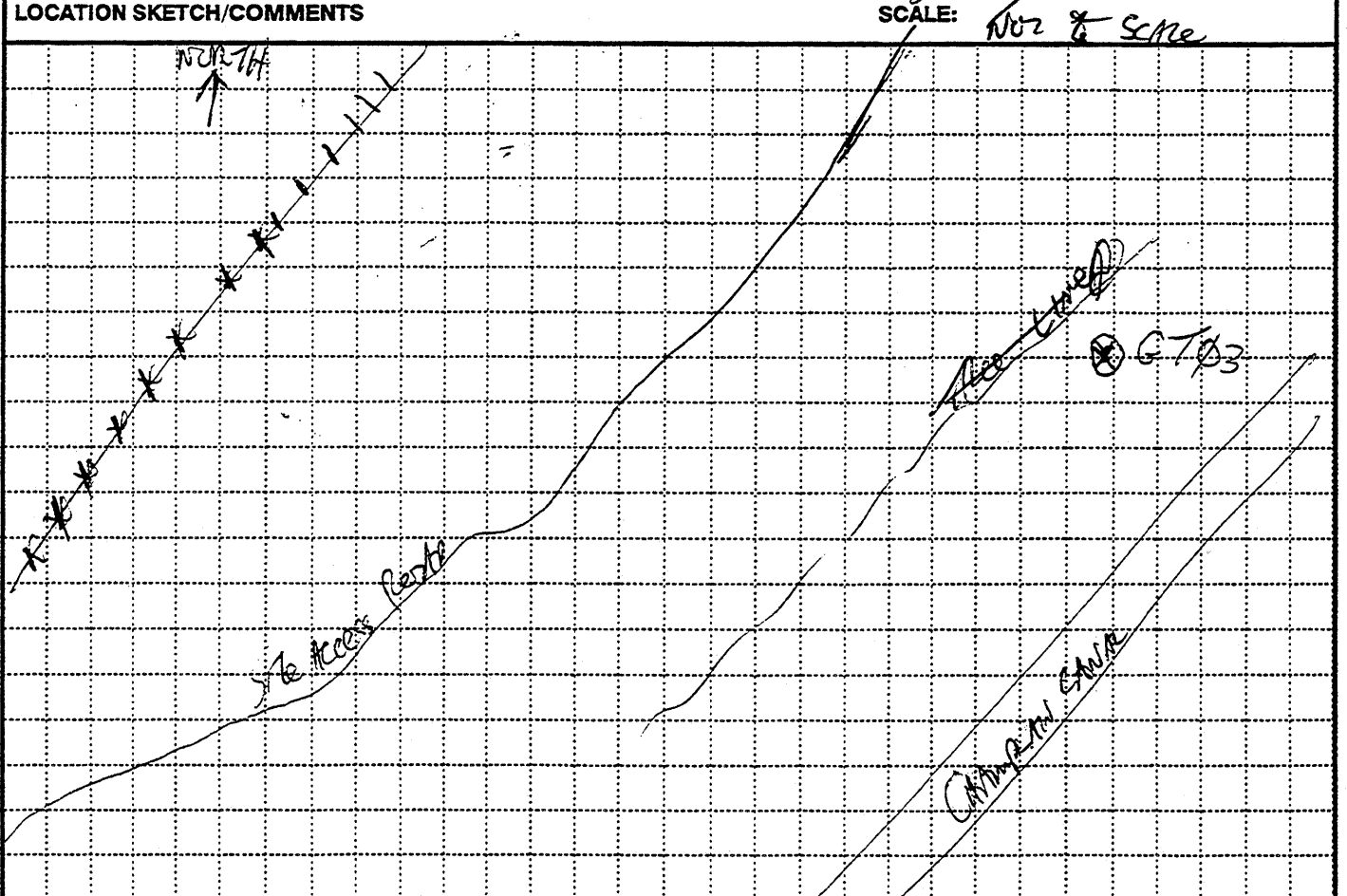
HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project		Inspector				Sheet	
Energy Park / Leasing		Tom Nickerson				5 of 6	
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	17	Sw	0.4 Pb 0.2 P10	-	-	3/4/2/2	80% Recovery
	18	Sc					
	19	CN	oppm			W.O.R. W.O.R. W.O.R. 3	80% Rec
	20						
	21	↓	oppm			W.O.R. W.O.R. W.O.R. 1/1	100% Rec
	22	↓					
	23	↓	oppm	EPL-G762- 1		W.O.R. W.O.R. 1/2	100% Rec
	24	↓		12:31			
	25	↓	oppm			2/2/2/2	
	26	Bottom of Hole: 24' For HSA 26' For SPT Spinning					

PROJECT: HANSON RIVER PCB FACILITY SITING HOLE NO.: EPL-G762

Borehole Record for EDL-GT03

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District	Hole Number	
1. Company Name <i>Ecology + Environment, Inc.</i>		2. Drill Subcontractor <i>KANSAS CITY GEOLOGIC</i>		Hole Number <i>G-703</i>
3. Project <i>Hudson River PCB</i>		4. Location <i>Energy Park, Long</i>		Sheet <i>1 of 6</i>
5. Name of Driller <i>JOFF THRU / DENNIS HANOUR</i>		6. Manufacturer's Designation of Drill <i>CME-45C</i>		Sheets
7. Sizes and Types of Drilling and Sampling Equipment <i>4 1/2" HSA 2' x 24' SPIN SPIND</i>		8. Hole Location <i>DRIVE SIDE OF S/C ACCESS RD</i>		1 of 6
12. Overburden Thickness <i>> 26'</i>		15. Depth Groundwater Encountered <i>3.9 Feet</i>		11. Date Completed <i>9/30/03</i>
13. Depth Drilled Into Rock <i>N/A</i>		16. Depth to Water and Elapsed Time After Drilling Completed <i>Time > 0.1 hr; DEPTH: 4.2' B.G.S</i>		10. Date Started <i>9/30/03</i>
14. Total Depth of Hole <i>26'</i>		17. Other Water Level Managements (Specify) <i>NOT RECORDED</i>		19. Total Number of Core Boxes <i>0</i>
18. Geological Samples		Disturbed <i>0</i>		Undisturbed <i>1</i>
20. Samples For Chemical Analysis		VOC <i>0</i>		Metals <i>0</i>
21. Disposition of Hole		Backfilled <i>X</i>		Monitoring Well <i>0</i>
22. Signature of Inspector <i>For J. Hanour</i>		Other (Specify) <i>Discard</i>		Other (Specify) <i>Discard</i>
23. Signature of Inspector		Other (Specify) <i>Discard</i>		Other (Specify) <i>Discard</i>
21. Total Core Recovery <i>N/A %</i>		Other (Specify) <i>Discard</i>		Other (Specify) <i>Discard</i>



PROJECT *Hudson River PCB Facility Siting* HOLE NO. *EPL-G703*

SCREENED WELL

Stick-up _____ ft

Top of Grout _____ ft

Top of Seal at _____ ft

Top of Sand Pack _____ ft

Top of Screen at _____ ft

Bottom of Screen at _____ ft

Bottom of Hole at _____ ft

Bottom of Sandpack at _____

Lock Number _____

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole Diameter _____ inches

Cement/Bentonite _____

Grout _____

Screen Slot Size _____

Screen Type _____

PVC _____

Stainless Steel _____

Pack Type/Size:

Sand _____

Gravel _____

Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

GEOTECHNICAL BORING ONLY; NO WELL CONSTRUCTION

- Collected one soil sample, EOL-6703-F, from the 11'-12' interval, for moisture content, grain particle size, and Atterberg Limit Analyses. Sample collected @ 15:32.

- An Breathing zone TVA readings were 2.1ppm

HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project		Inspector				Sheet	Sheets
ENERGY PACT/Leage		Tom Nickerson				3	of 6
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D) (ppm)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	1	OL	0.1 ppm			21	2/3/2/3
	2	ML	0.1 ppm on PLO 0.0 ppm on FID			50% Rec	
	3	SM	0 FID 0.4 ppm PLO			50% Rec	2/2/1-FOOT 1-FOOT
	4						
	5		0.15 FID 0.35 (PLO)			75% Rec	1/1/2/3
	6	SW					
	7		PLO: 0.25 ppm FID: 0.10 ppm			4/5/5/4	100% Rec
	8						
	9	↓ probe to SP	PLO = 0.3 FID = 0.15			2/1/1/1	70% Rec
	10						
	11		PLO 0.1 FID 0.0			1/1/1/3	100% Rec
	12						
	13		FID 0.1 PLO 0.0			2/2/2/2	90% Rec
	14						
	15		FID 0.15 PLO 0.1			2/2/2/4	90% Rec
	16	SC					

PROJECT HUDSON RIVER PCB FACILITY SITING

HOLE NO. EPL-GT03

HTRW DRILLING LOG (Continuation Sheet)							Hole Number	
Project			Inspector				EPL-GT03	
Elevation (A)			Depth (B)		Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	
						Analytical Sample No. (F)	Blow Count (G)	
							Remarks (H)	
27			SC				3/4/85 50%	
28			SC		PI = 0.1 FI = 0			
19			SC		PI = 0.35 FI = 0.1		3/2/2/3 50% 25% with 18 SLough	
20			SC		PI = 0 FI = 0			
21			SC		PI = 0 FI = 0		3/3/4/4 25% NATIVE 50% total	
22			SC		PI = 0.2 FI = 0.1			
23			SC		PI = 0.1 FI = 0		2/2/4/4 50% 25% Re	
24			SC		PI = 0.1 FI = 0			
25			SC		PI = 0.1 FI = 0		3/4/86 50% NATIVE RECOVERY	
26			Bottom of Hole 26' BG5					

PROJECT: ADDISON RIVER PCB FACILITY SITING HOLE NO. EPL-GT03

Borehole Record for

EP2-G7φ4

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District	Hole Number	
1. Company Name <i>ECOLOGY + ENVIRONMENT, INC</i>		<i>KANSAS CITY</i>	<i>EPL-GT04</i>	
3. Project <i>ENERGY PARK/LONGE; HUDSON RIVER PCB FACILITY</i>		2. Drill Subcontractor <i>GEOLOGIC</i>	Sheet	Sheets
5. Name of Driller <i>JEFF THEW; DENNIS HONOUR</i>		4. Location <i>ENERGY PARK/LONGE; FOOT EDWARDS, MO</i>		<i>1 of 6</i>
7. Sizes and Types of Drilling and Sampling Equipment <i>4 1/4" HSA 2" X 24" SPLIT SPEED</i>		6. Manufacturer's Designation of Drill <i>CME-45C</i>		
		8. Hole Location <i>Slightly west of size area road northern</i>		
		9. Surface Elevation <i>Part of Energy Park fence</i>		
12. Overburden Thickness <i>726'</i>		10. Date Started <i>10/1/03</i>		11. Date Completed <i>10/1/03</i>
13. Depth Drilled into Rock <i>NIA</i>		15. Depth Groundwater Encountered <i>8.3' BGS</i>		
14. Total Depth of Hole <i>SPLIT SPEED 26' HSA → 24</i>		16. Depth to Water and Elapsed Time After Drilling Completed <i>6.54' BGS AFTER PUMPING ARE REMOVED FROM HOLE</i>		
18. Geological Samples		17. Other Water Level Managements (Specify) <i>NOT RECORDED</i>		
Disturbed <i>0</i>		Undisturbed <i>0</i>		19. Total Number of Core Boxes <i>0</i>
20. Samples For Chemical Analysis		21. Total Core Recovery		
VOC <i>0</i>		Metals <i>0</i>		<i>0 %</i>
21. Disposition of Hole <i>X</i>		Backfilled		Monitoring Well
		Other (Specify)		23. Signature of Inspector <i>Jim Johnston</i>
LOCATION SKETCH/COMMENTS <i>IN OPEN AREA; NO NEARBY FEATURES</i>				
PROJECT <i>HUDSON RIVER PCB FACILITY SITING PROJECT</i>			HOLE NO. <i>EPL-GT04</i>	

	Lock Number _____	
SCREENED WELL	Inner Casing Material _____	OPEN-HOLE WELL
Stick-up _____ ft	Inner Casing Inside Diameter _____ inches	Stick-up _____ ft
Top of Grout _____ ft	GROUND SURFACE	Inner Casing Material _____
Top of Seal at _____ ft	Quantity of Material Used:	Inner Casing Inside Diameter _____ inches
Top of Sand Pack _____ ft	Bentonite Pellets _____	Outer Casing Diameter _____ inches
Top of Screen at _____ ft	Cement _____	Borehole Diameter _____ ft
Bottom of Screen at _____ ft	Borehole _____ inches Diameter	Bedrock _____ ft
Bottom of Hole at _____ ft	Cement/Bentonite _____	Bottom of Rock Socket/Outer Casing _____ ft
Bottom of Sandpack at _____	Grout _____	Bottom of Inner Casing _____ ft
	Screen Slot Size _____	Corehole Diameter _____
	Screen Type _____	Bottom of Corehole _____ ft
	<input type="checkbox"/> PVC _____	
	<input type="checkbox"/> Stainless Steel _____	
	Pack Type/Size:	
	<input type="checkbox"/> Sand _____	
	<input type="checkbox"/> Gravel _____	
	<input type="checkbox"/> Natural _____	

NOTE: See pages 136 and 137 for well construction diagrams

Well NOT constructed, GEOTECHNICAL BORING ONLY

Collected CONTINUOUS MOISTURE profile samples at this location.

- sample EPL-6704 A SUBMITTED FOR FOU GEOTECHNICAL SIZE (PARTICLE SIZE, MOISTURE CONTENT, CATIONIC LIMITS).
collected @ 0846 from the 0-20 2 FOOT depth interval.

HTRW DRILLING LOG (Continuation Sheet)							Hole Number EPL-GT04	
Project Energy Park / Large / Hudson River			Inspector Joni Nickerson			Sheet 3 of 6		
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)	
	1	OL	PI = 0.3 FI = 0.3		EPL-GT04-A	2/5/5/7	95% Rec.	
	2	↓						
	3	↓	PI = 0.1 FI = 0.2		B	2/2/2/1	40% Rec.	
	4							
	5	↓	0.6 PI 0.2 FI		C	W. 0.2 1/1/1	30% Rec.	
	6							
	7	↓	PI = 0.2 FI = 0		D	1/5/2/1	30% Rec.	
	8							
	9	SW	.25 PI FI = 0.25		E	2/2/2/2 4	90% Rec.	
	10	SW						
	11	↓ SP @ 11.5-12	PI = 0.3 FI = 0		F	5/9/7/6	75% Rec.	
	12							
	13	SP	PI = 0.3 FI = 0		G	4/3/4/4	95% Rec.	
	14							
	15	SP	PI = 0.5 FI = 0.1		H	4/2/1/1 15	100% Rec.	
	16							

PROJECT: HUDSON RIVER PCB FACILITY SITING
HOLE NO.: EPL-GT04

HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project Energy Path / <i>Anderson River</i>		Inspector <i>Tom Nickerson</i>				Sheet	5 of 6
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	17	SP	PID = 0.4 FD = 0		F	4/5/4	30% Rec.
	18	↓					
	19	↓	PID = 0 FD = 0		J	2/3/5	40% Rec.
	20	SP					
	21	↓ SP	PID = 0.2 FD = 0		K	2/5/4	50% Rec.
	22	ML					
	23	↓	PID = 0.1 FD = 0		L	4/4/4	75% Rec.
	24	↓					
	25	↓	PID = 0.3 FD = 0		M	4/5/4	75% Rec.
	26	↓					
Bottom of hole: HSA to 24" BGS Spitz samples to 26' BGS							

PROJECT *Anderson River Factory Siting*

HOLE NO. *EPZ-6704*

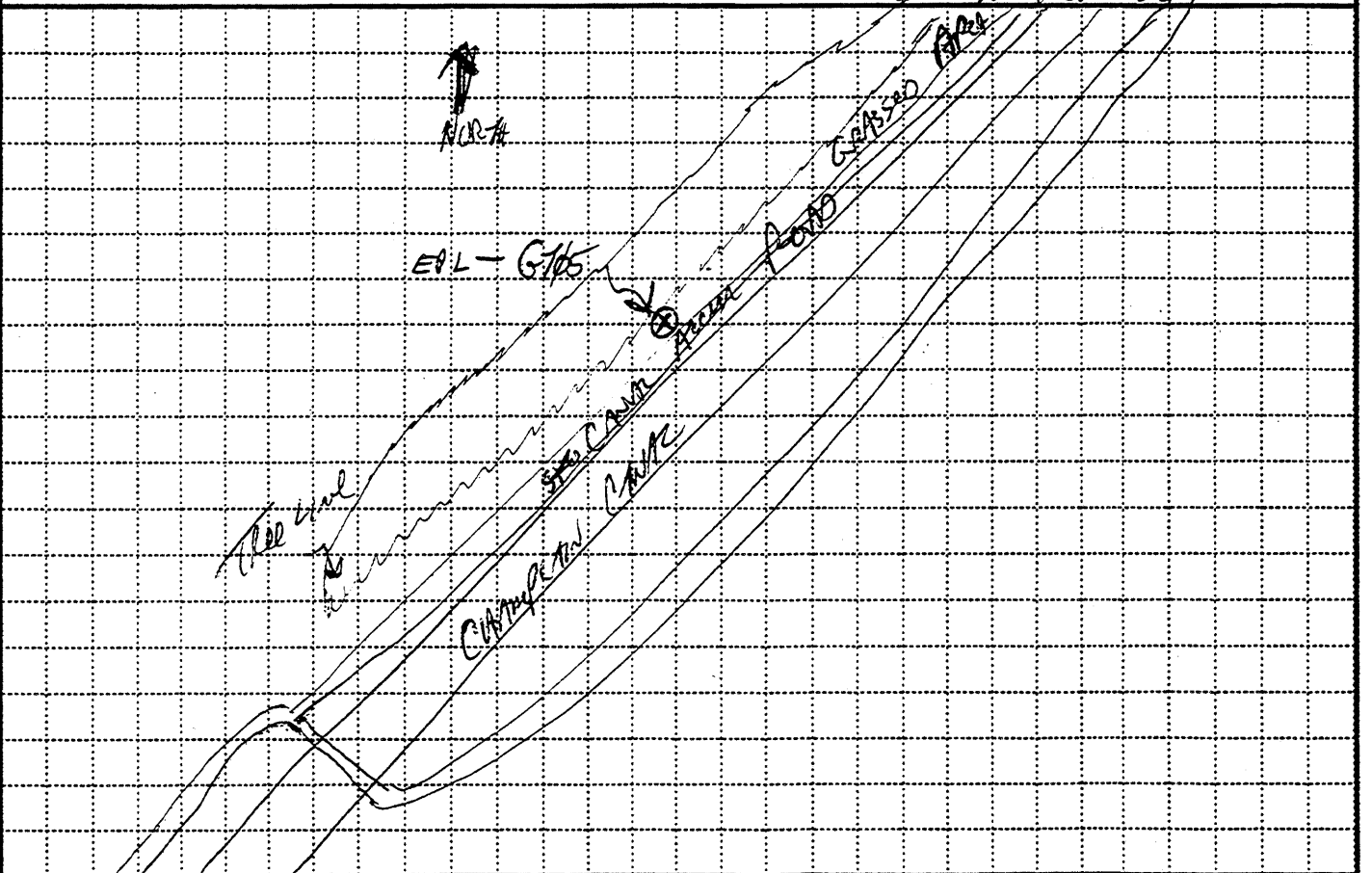
Borehole Record for EDL-GT05

- HTRW Drilling Log
- Narrative Lithologic Description and Well Construction Diagram
- Well Development Record
- Well Development -- Parameter Measurements
- Groundwater Purge and Sampling Log
- Investigation - Derived Waste Inventory Sheet

HTRW DRILLING LOG		District <i>KANSAS City</i>	Hole Number <i>EPL-G-705</i>	
1. Company Name <i>Ecology And Environmental, INC.</i>		2. Drill Subcontractor <i>GEOLOGIC, INC</i>		Sheet <i>1</i>
3. Project <i>Hudson River PCB Energy Park/Leach</i>		4. Location <i>FORT EDWARD NY</i>		
5. Name of Driller <i>JEFF THEW / DENNIS HONOUR</i>		6. Manufacturer's Designation of Drill <i>CME 45-C</i>		
7. Sizes and Types of Drilling and Sampling Equipment <i>4 1/2" HSA 2" X 24" spin speed</i>		8. Hole Location <i>FOR EAST SIDE OF SITE, ADJACENT TO CARPET ACCESS</i>		
		9. Surface Elevation <i>ROAD</i>		
		10. Date Started <i>10/1/03</i>	11. Date Completed <i>10/1/03</i>	
12. Overburden Thickness <i>726'</i>		15. Depth Groundwater Encountered <i>3.2' BGS</i>		
13. Depth Drilled Into Rock <i>0</i>		16. Depth to Water and Elapsed Time After Drilling Completed <i>NOL RECORDED</i>		
14. Total Depth of Hole <i>26'</i>		17. Other Water Level Managements (Specify) <i>NOT RECORDED</i>		
18. Geological Samples		Disturbed	Undisturbed <i>1</i>	19. Total Number of Core Boxes <i>0</i>
20. Samples For Chemical Analysis		VOC <i>0</i>	Metals <i>0</i>	Other (Specify) <i>PARTICLE SIZE</i>
21. Disposition of Hole		Backfilled <i>X</i>	Monitoring Well	Other (Specify)
				23. Signature of Inspector <i>Jim Ferman</i>

LOCATION SKETCH/COMMENTS

SCALE: *NOT TO SCALE*



PROJECT <i>Hudson River PCB Facility Siting</i>	HOLE NO. <i>EPL-G-705</i>
--	------------------------------

PAB 10/14

G-705

Lock Number _____

SCREENED WELL **OPEN-HOLE WELL**

Stick-up _____ ft Stick-up _____ ft

Inner Casing Material _____ Inner Casing Material _____

Inner Casing Inside Diameter _____ inches Inner Casing Inside Diameter _____ inches

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole Diameter _____ inches

Cement/Bentonite _____

Grout _____

Screen Slot Size _____

Screen Type _____

PVC _____

Stainless Steel _____

Pack Type/Size:

Sand _____

Gravel _____

Natural _____

Top of Grout _____ ft

Top of Seal at _____ ft

Top of Sand Pack _____ ft

Top of Screen at _____ ft

Bottom of Screen at _____ ft

Bottom of Hole at _____ ft

Bottom of Sandpack at _____

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

GEO TECHNICAL BORING ONLY; NO WELL INSTALLED

Collected one soil sample to be submitted for PARTICLE SIZE, ATTENBURY, AND GRAIN SIZE ANALYSES.

EPL-G-705-0, From the 6'-8' INTERVAL, AT 13:37

- All Breathing Zone TVL-1000 READINGS were 1 ppm

HTRW DRILLING LOG (Continuation Sheet)							Hole Number
Project Energy Park / Range			Inspector Tom Nickerson			EPL-GT05	
						Sheet	Sheets
						3	of 6
Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D)	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
	1	ML	PID = 23 FID = 0.52			w.o.r. 1/1/1	75% Rec
	2	↓					
	3	↓	PID = 0 FID = 0			w.o.r. 1/1/1	5% Rec
	4	↓					
	5	↓	PID = 0.6 FID = 0.1			w.o.r. w.o.r. 1/1	50% Rec
	6	↓					
	7	ML	PID = 0.7 FID = 0.2		EPL-GT05	1/1/1/2	100% Rec
	8	SW					
	9	SC	PID = 0.3 FID = 0.2			w.o.r. 1/1/2	75% Rec
	10	SW					
	11	MH	PID = 0 FID = 0			2/4/5/6	100% Rec
	12	SW					
	13	↓	PID = 3 FID = 13			5/5/2/2	100% Rec
	14	SP	PID = 0.2 FID = 0.2				
	15	PT				w.o.r. 1/1/1	
	16	CH					

PROJECT HUDSON RIVER PCB FACILITY SITING

HOLE NO. EPL-GT05

HTRW DRILLING LOG (Continuation Sheet)

Hole Number
EPL-6705
Sheet 5 of 6

Project
Energy Park / Large

Inspector
Jen Nickerson

Elevation (A)	Depth (B)	Description of Materials (C)	Field Screening Results (D) @m	Geotech Sample or Core Box No. (E)	Analytical Sample No. (F)	Blow Count (G)	Remarks (H)
17		CH ↓	PI = 0.1 FI = 0.1			2/5/5	100% Ree
18		↓					
19		↓	PI = 0.3 FI = 0.2			5/5/4	100% Ree
20							
21		↓	PI = 0.15 FI = 0.1			5/4/3	100% Ree
22							
23		↓	PI = 0.2 FI = 0			5/4/3 2/2/1	75% Ree
24		↓					
25		CH	PI = 0.2 FI = 0			1/2/1	75% Ree
26	Bottom of Hole: 26' by split spoon sampling						

PROJECT
HUDSON RIVER PCB FACILITY SITING

HOLE NO.
EPL-6705

**Energy Park/Longe/New York State Canal Corporation
Site**

Supplemental Geotechnical Information

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**TABLE 1
SUMMARY**

**PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE**

FILE NO.: 0104

DATE: 16 OCT 03

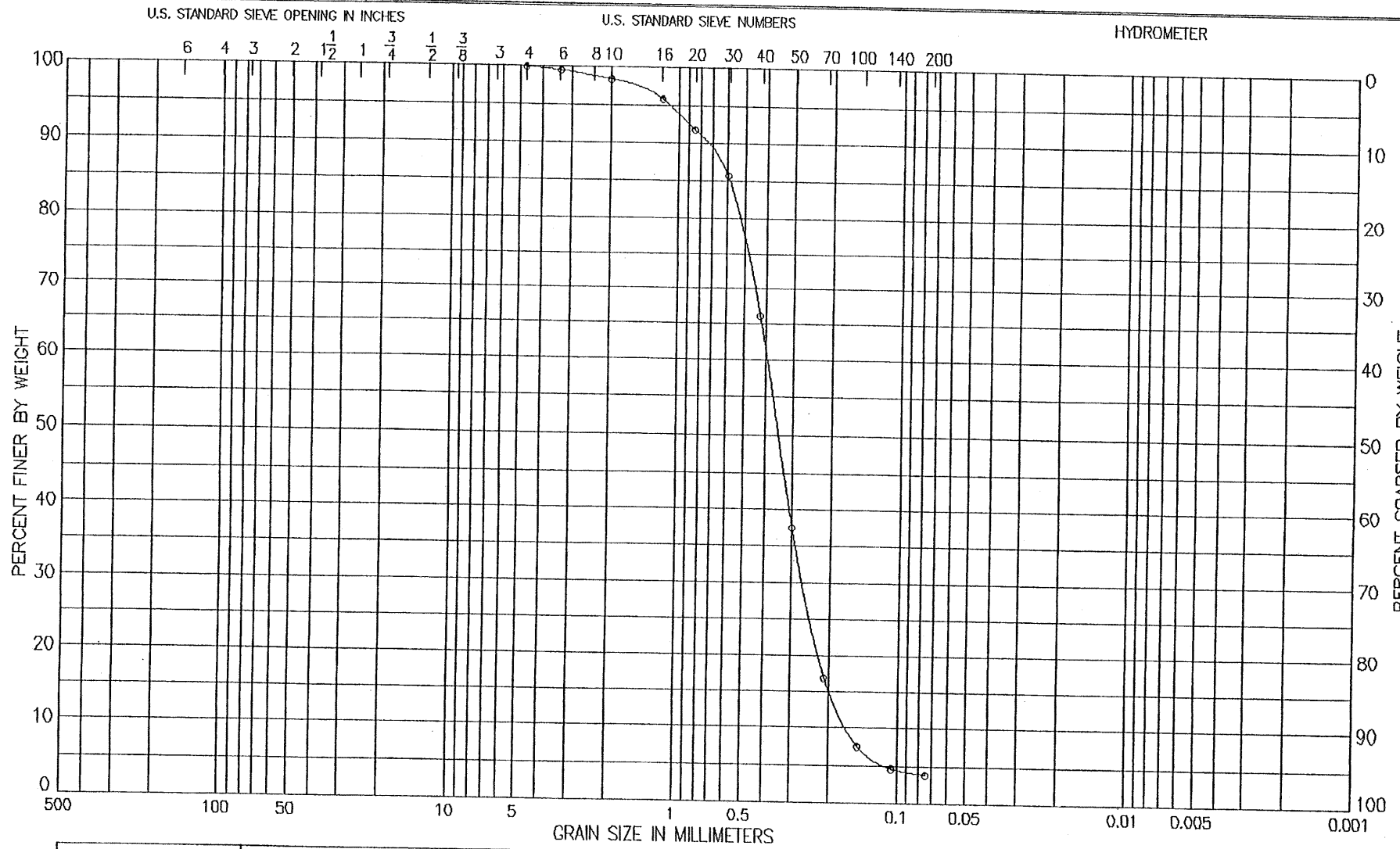
CLASSIFIED BY: AT

LOCATION OR BORING	SAMPLE NO.	ELEV. OR DEPTH	LL/PL	SAMPLE DESCRIPTION	NAT. W. C. %
EPL-GT01	A	0-2			7.5
EPL-GT01	B	2-4			7.8
EPL-GT01	C	4-6	NP	SAND (SP), GRAY	13.3
EPL-GT01	D	6-8			18.7
EPL-GT01	E	8-10			15.9
EPL-GT01	F	10-12			15.9
EPL-GT01	G	12-14			15.1
EPL-GT01	H	14-16			16.8
EPL-GT01	I	16-18			14.7
EPL-GT01	J	18-20			17.3
EPL-GT01	K	20-22			15.9
EPL-GT01	L	22-24			13.5
EPL-GT01	M	24-26			16.7
EPL-GT03	F	11-12	NP	SILTY SAND (SW-SM), DARK GRAY, TRACE OF GRAVEL	17.2
EPL-GT05	D	6-8	NP	SILTY SAND (SM), GRAY	20.6
EPL-GT02	L	22-24	60/24	CLAY (CH), GRAY	69.0
EPL-GT04	A	0-2	NP	SILTY SAND (SM), GRAY; WITH GRAVEL	12.4
EPL-GT04	B	2-4			14.4
EPL-GT04	C	4-6			13.5
EPL-GT04	D	6-8			16.6
EPL-GT04	E	8-10			16.8

REMARKS: Page 1 of 2

ENCL 1

B-121



COBBLES	GRAVEL		SAND			SILT or CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

LL	NP	PL	PI	GS	NAT W, %	13.3	ORG, %	PROJECT HUDSON RIVER PCBs SUPERFUND SITE	
CLASSIFICATION SAND (SP), GRAY								ENERGY PARK/LONGE	
GRADATION CURVE								LABORATORY USAE WES - STF/GL	
				BORING NO.		EPL-GT01		SAMPLE NO. C	
				DEPTH/ELEV		4-6		DATE 16 OCT 03	

SIEVE ANALYSIS

PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE

BORING: EPL-GT01 SAMPLE: C DF: 0104 .DAT
DEPTH: 4-6 DATE: 16 OCT 03

NON-PLASTIC GS: .00 WC: 13.30
CLASSIFICATION: 108
SAND (SP), GRAY

TOTAL WEIGHT OF SAMPLE: .0 gms.
PARTIAL WEIGHT AFTER SPLIT: 75.9 gms.

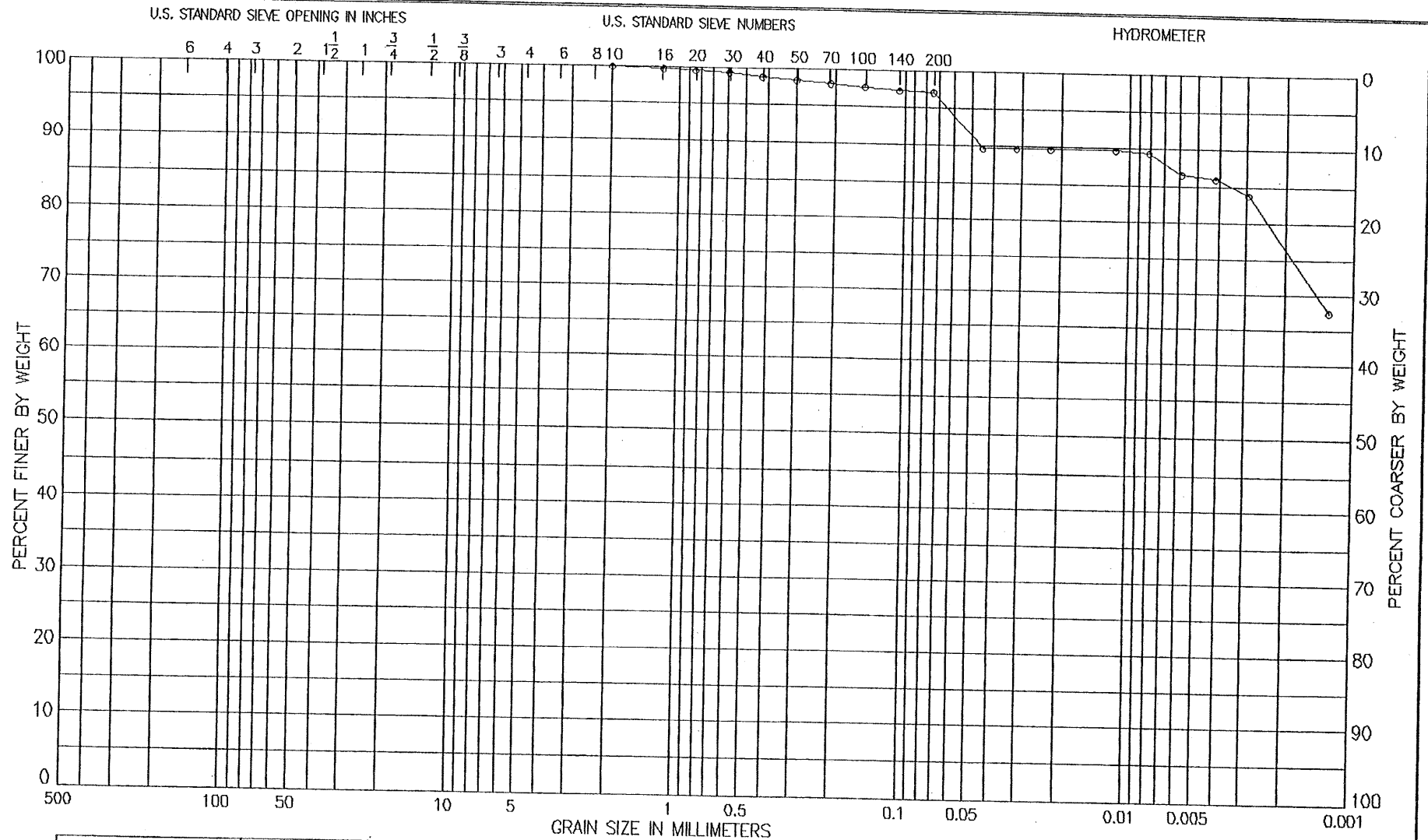
WEIGHTS gm.	SIEVE SIZE or NUMBER	OPENING mm	PERCENT FINER	PERCENT COARSER
.0	No 4	4.750	100.0	.0
.3	No 6	3.350	99.6	.4
1.2	No 10	2.000	98.4	1.6
3.1	No 16	1.180	95.9	4.1
6.2	No 20	.850	91.8	8.2
10.8	No 30	.600	85.8	14.2
25.7	No 40	.425	66.1	33.9
47.4	No 50	.300	37.5	62.5
63.1	No 70	.212	16.9	83.1
70.1	No 100	.150	7.6	92.4
72.3	No 140	.106	4.7	95.3
72.9	No 200	.075	4.0	96.0

PERCENT GRAVEL = .0
PERCENT SAND = 96.0
PERCENT FINES = 4.0

D60 = .40
D30 = .27
D10 = .17
CU = 2.40
CC = 1.09

EDE

B-123



COBBLES	GRAVEL		SAND			SILT or CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

LL	60	PL	24	PI	36	GS	2.70	EST	NAT W, %	69.0	ORG, %
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CLASSIFICATION
CLAY (CH), GRAY

PROJECT HUDSON RIVER PCBs SUPERFUND SITE
ENERGY PARK/LONGE
BORING NO. EPL-GT02 SAMPLE NO. L
DEPTH/ELEV 22-24 DATE 23 OCT 03

GRADATION CURVE LABORATORY USAE WES - STF/GL

SIEVE ANALYSIS

PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE

BORING: EPL-GT02 SAMPLE: L DF: 0104A .DAT
DEPTH: 22-24 DATE: 23 OCT 03

LL: 60 PL: 24 PI: 36 GS: 2.70 est WC: 69.00
CLASSIFICATION: 124
CLAY (CH), GRAY

TOTAL WEIGHT OF SAMPLE: .0 gms.
PARTIAL WEIGHT AFTER SPLIT: 51.7 gms.

WEIGHTS gm.	SIEVE SIZE or NUMBER	OPENING mm	PERCENT FINER	PERCENT COARSER
.0	No 10	2.000	100.0	.0
.1	No 16	1.180	99.8	.2
.2	No 20	.850	99.6	.4
.3	No 30	.600	99.4	.6
.6	No 40	.425	98.8	1.2
.8	No 50	.300	98.5	1.5
1.0	No 70	.212	98.1	1.9
1.2	No 100	.150	97.7	2.3
1.4	No 140	.106	97.3	2.7
1.5	No 200	.075	97.1	2.9

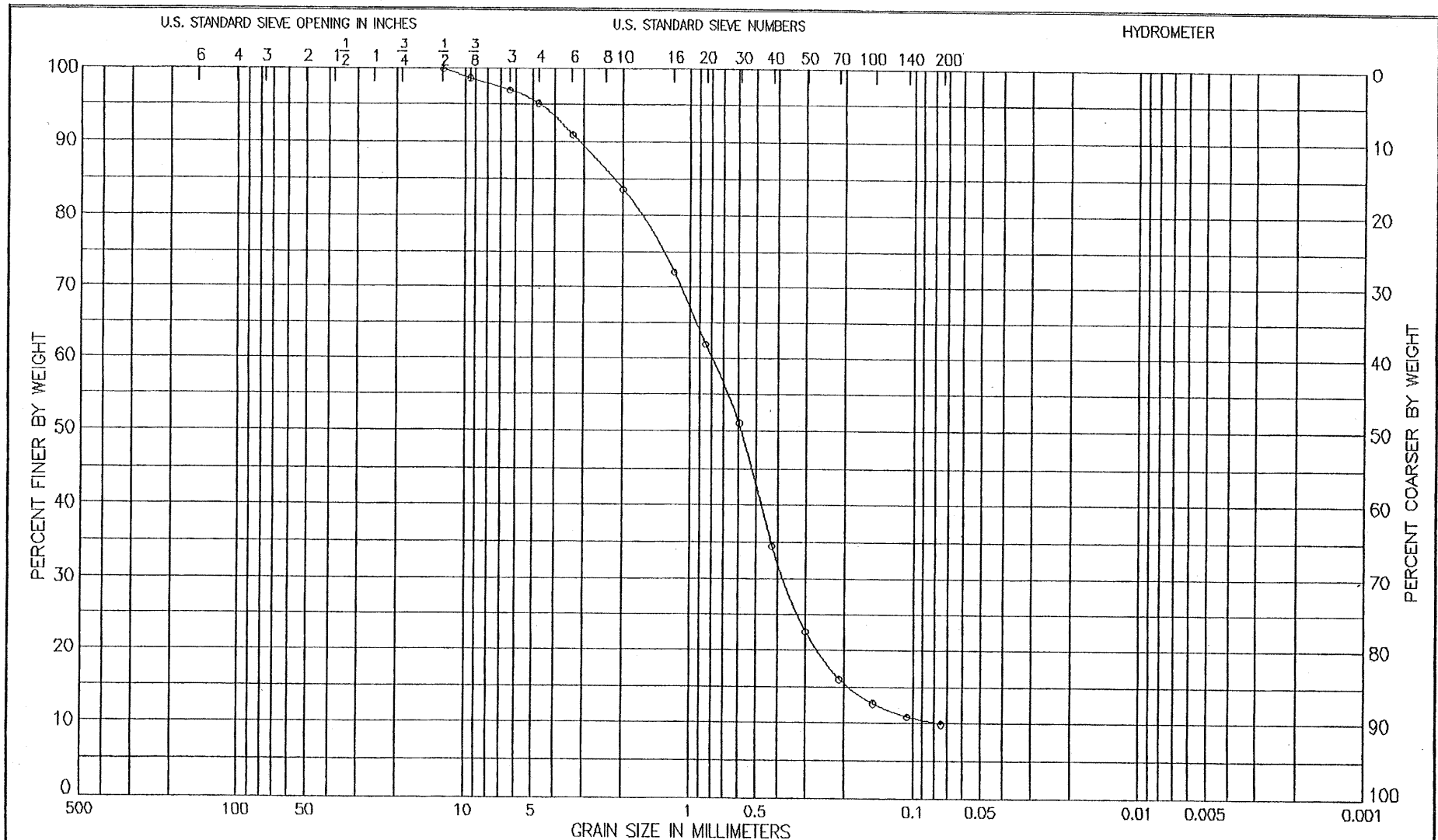
HYDROMETER:

RDGS	TEMP			
29.0	23.5	.0450	89.7	10.3
29.0	23.5	.0318	89.7	10.3
29.0	23.5	.0225	89.7	10.3
29.0	23.5	.0116	89.7	10.3
28.9	23.5	.0082	89.4	10.6
28.0	23.5	.0059	86.6	13.4
27.8	23.5	.0042	86.0	14.0
27.1	23.5	.0030	83.9	16.1
21.8	23.5	.0013	67.6	32.4

PERCENT GRAVEL = .0
PERCENT SAND = 2.9
PERCENT FINES = 97.1

EDE

B-125



COBBLES	GRAVEL		SAND			SILT or CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

LL	NP	PL	PI	GS	NAT W,% 17.2	ORG,%	PROJECT HUDSON RIVER PCBS SUPERFUND SITE ENERGY PARK/LONGE
CLASSIFICATION SILTY SAND (SW-SM), DARK GRAY; TRACE OF GRAVEL							BORING NO. EPL-GT03 SAMPLE NO. F
GRADATION CURVE				LABORATORY USAE WES - STF/GL			DEPTH/ELEV 11-12 DATE 16 OCT 03

SIEVE ANALYSIS

PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE

BORING: EPL-GT03 SAMPLE: F DF: 0104 .DAT
DEPTH: 11-12 DATE: 16 OCT 03

NON-PLASTIC GS: .00 WC: 17.20
CLASSIFICATION: 118
SILTY SAND (SW-SM), DARK GRAY; TRACE OF GRAVEL

TOTAL WEIGHT OF SAMPLE: 1031.9 gms.
PARTIAL WEIGHT AFTER SPLIT: 84.3 gms.

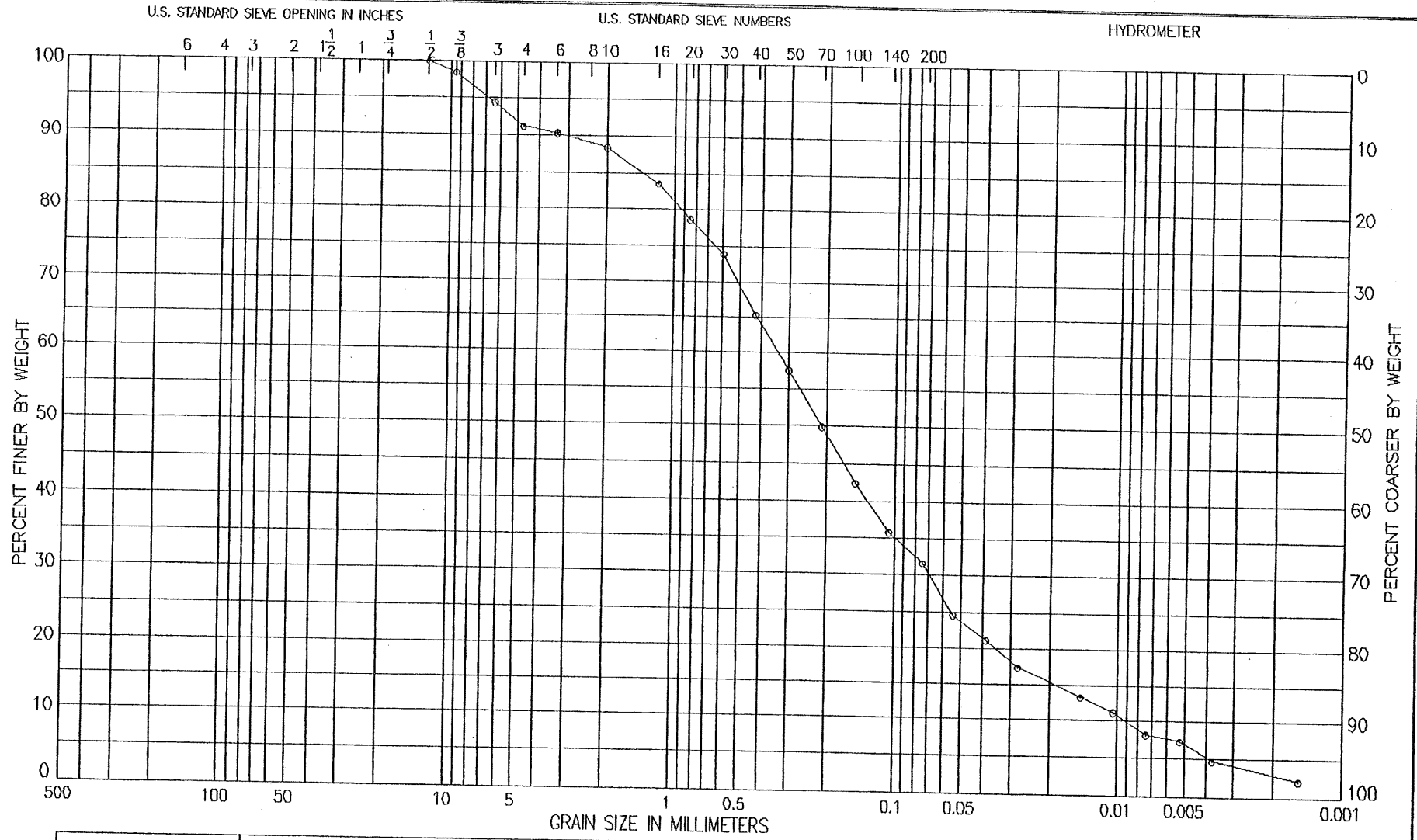
WEIGHTS gm.	SIEVE SIZE or NUMBER	OPENING mm	PERCENT FINER	PERCENT COARSER
.0	1/2 in	12.500	100.0	.0
13.5	3/8 in	9.500	98.7	1.3
17.4	No 3	6.350	97.0	3.0
18.5	No 4	4.750	95.2	4.8
3.7	No 6	3.350	91.0	9.0
10.3	No 10	2.000	83.6	16.4
20.4	No 16	1.180	72.2	27.8
29.4	No 20	.850	62.0	38.0
39.1	No 30	.600	51.1	48.9
53.7	No 40	.425	34.6	65.4
64.3	No 50	.300	22.6	77.4
70.1	No 70	.212	16.0	84.0
73.0	No 100	.150	12.8	87.2
74.6	No 140	.106	11.0	89.0
75.5	No 200	.075	9.9	90.1

PERCENT GRAVEL = 4.8
PERCENT SAND = 85.3
PERCENT FINES = 9.9

D60 = .80
D30 = .38
D10 = .08
CU = 10.46
CC = 2.30

EDE

B-127



SIEVE ANALYSIS

PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE

BORING: EPL-GT04 SAMPLE: A DF: 0104A .DAT
DEPTH: 0-2 DATE: 23 OCT 03

NON-PLASTIC GS: 2.67 est WC: 12.40
CLASSIFICATION: 142
SILTY SAND (SM), GRAY; WITH GRAVEL

TOTAL WEIGHT OF SAMPLE: 522.6 gms.
PARTIAL WEIGHT AFTER SPLIT: 66.1 gms.

WEIGHTS gm.	SIEVE SIZE or NUMBER	OPENING mm	PERCENT FINER	PERCENT COARSER
.0	1/2 in	12.500	100.0	.0
7.9	3/8 in	9.500	98.5	1.5
21.4	No 3	6.350	94.4	5.6
16.8	No 4	4.750	91.2	8.8
4.7	No 6	3.350	90.3	9.7
9.3	No 10	2.000	88.5	11.5
3.7	No 16	1.180	83.5	16.5
7.4	No 20	.850	78.6	21.4
10.9	No 30	.600	73.9	26.1
17.3	No 40	.425	65.3	34.7
23.1	No 50	.300	57.6	42.4
28.9	No 70	.212	49.8	50.2
34.4	No 100	.150	42.4	57.6
39.3	No 140	.106	35.9	64.1
42.5	No 200	.075	31.6	68.4

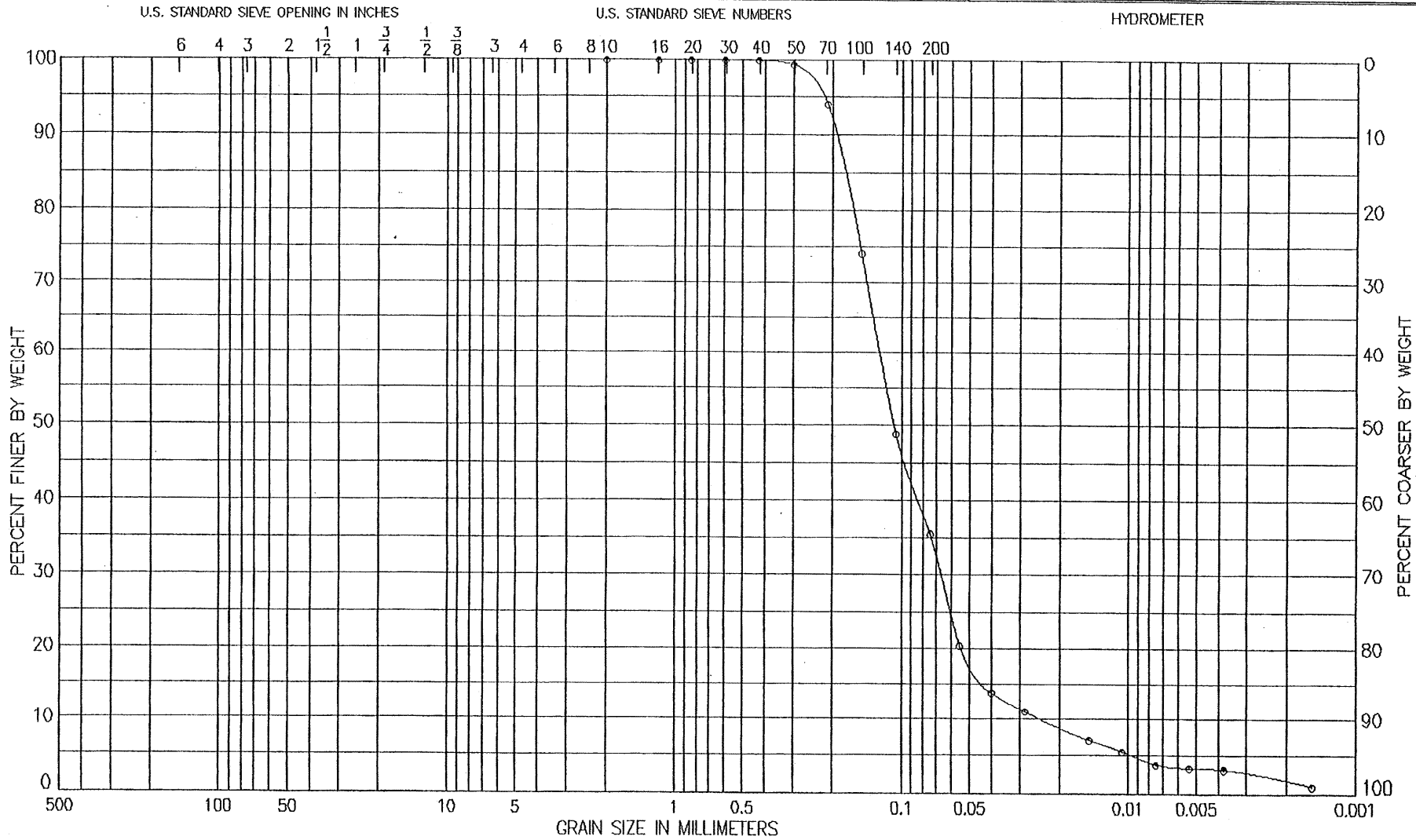
HYDROMETER:

RDGS	TEMP			
11.3	23.5	.0543	24.6	75.4
9.7	23.5	.0389	21.2	78.8
7.9	23.5	.0279	17.3	82.7
6.0	23.5	.0146	13.3	86.7
5.0	23.5	.0104	11.1	88.9
3.6	23.5	.0075	8.1	91.9
3.2	23.5	.0053	7.3	92.7
2.0	23.5	.0038	4.7	95.3
.8	23.5	.0016	2.1	97.9

PERCENT GRAVEL = 8.8
PERCENT SAND = 59.6
PERCENT FINES = 31.6

EDE

B-129



SIEVE ANALYSIS

PROJECT: HUDSON RIVER PCBS SUPERFUND SITE
ENERGY PARK/LONGE

BORING: EPL-GT05 SAMPLE: D DF: 0104A .DAT
DEPTH: 6-8 DATE: 23 OCT 03

NON-PLASTIC GS: 2.67 est WC: 20.60
CLASSIFICATION: 108
SILTY SAND (SM), GRAY

TOTAL WEIGHT OF SAMPLE: .0 gms.
PARTIAL WEIGHT AFTER SPLIT: 72.3 gms.

WEIGHTS gm.	SIEVE SIZE or NUMBER	OPENING mm	PERCENT FINER	PERCENT COARSER
.0	No 10	2.000	100.0	.0
.0	No 16	1.180	100.0	.0
.0	No 20	.850	100.0	.0
.0	No 30	.600	100.0	.0
.0	No 40	.425	100.0	.0
.4	No 50	.300	99.4	.6
4.3	No 70	.212	94.1	5.9
18.8	No 100	.150	74.0	26.0
37.0	No 140	.106	48.8	51.2
46.6	No 200	.075	35.5	64.5

HYDROMETER:

RDGS	TEMP			
9.0	23.5	.0554	20.3	79.7
6.0	23.5	.0401	13.7	86.3
4.8	23.5	.0286	11.1	88.9
3.0	23.5	.0150	7.1	92.9
2.3	23.5	.0107	5.5	94.5
1.5	23.5	.0076	3.8	96.2
1.3	23.5	.0054	3.3	96.7
1.2	23.5	.0038	3.1	96.9
.2	23.5	.0016	.9	99.1

PERCENT GRAVEL = .0
PERCENT SAND = 64.5
PERCENT FINES = 35.5

EDE